

ENCYCLOPAEDISM from Antiquity to the Renaissance

EDITED BY
JASON KÖNIG AND GREG WOOLF



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Encyclopaedism from Antiquity to the Renaissance

There is a rich body of encyclopaedic writing from the two millennia before the Enlightenment. This book sheds new light on this material. It traces the development of traditions of knowledge-ordering which stretched back to Pliny and Varro and others in the classical world. It works with a broad concept of encyclopaedism, resisting the idea that there was any clear pre-modern genre of the 'encyclopaedia', and showing instead how the rhetoric and techniques of comprehensive compilation left their mark on a surprising range of texts. In the process it draws attention to both remarkable similarities and striking differences between conventions of encyclopaedic compilation in different periods. The focus is primarily on European/Mediterranean culture. The book covers classical, medieval (including Byzantine and Arabic) and Renaissance culture in turn, and combines chapters which survey whole periods with others focused closely on individual texts as case studies.

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Abbreviations

For the most part we have avoided abbreviations in footnotes, although some classical chapters use standard abbreviations from *L'Année Philologique*, the *Greek-English Lexicon* (LSJ) and the *Oxford Latin Dictionary*. Some of these abbreviations are reproduced below for convenience, along with others which are not listed in those sources.

<i>Anth. Pal.</i>	<i>Anthologia Palatina</i>
<i>BHG</i>	<i>Bibliotheca hagiographica graeca</i>
<i>CE</i>	<i>Constantinian Excerpts</i>
<i>C. Just.</i>	<i>Justinianic Code</i>
<i>CPF</i>	<i>Corpus dei papiri filosofici</i>
<i>CPG</i>	Geerard, M. (ed.) <i>Clavis patrum graecorum</i>
<i>C. Theod.</i>	<i>Theodosian Code</i>
<i>Dig.</i>	Justinian, <i>Digest</i>
<i>DMB</i>	<i>Dictionary of Ming Biography</i>
<i>EETS ES</i>	Early English Text Society, Extra Series
<i>EETS OS</i>	Early English Text Society, Original Series
<i>Encyclopaedia of Islam</i>	Brill's <i>Encyclopaedia of Islam</i> (second edition: Bearman, P. J. <i>et al.</i> (eds.) 1960–2005; third edition: Fleet, K. <i>et al.</i> (eds.) 2007–)
<i>ESAR</i>	Frank, T. (ed.) <i>An Economic Survey of Ancient Rome</i>
<i>FGrHist</i>	Jacoby, F. (ed.) <i>Die Fragmente der griechischen Historiker</i>
<i>FIRA</i>	Riccobono, S. <i>et al.</i> (eds.) <i>Fontes iuris romani antejustiniani</i>
<i>K</i>	Kühn, K. G. (ed.) <i>Opera omnia Claudii Galeni</i>
<i>K-A</i>	Kassel, R. and Austin, C. (eds.) <i>Poetae Comici Graeci</i>
<i>LSJ</i>	H. G. Liddell and R. Scott <i>et al.</i> <i>A Greek-English Lexicon</i> (9th edition, with supplement)
<i>New Pauly</i>	Cancik, H., Schneider, H. and Landfester, M. (eds.) <i>Brill's New Pauly: Encyclopaedia of the Ancient World</i>
<i>Page</i>	Page, D. L. (ed.) <i>Poetae Melici Graeci</i>
<i>Pfeiffer</i>	Pfeiffer, R. (ed.) <i>Callimachus</i>
<i>PG</i>	Migne, J.-P. (ed.) <i>Patrologia Graeca</i>
<i>PLP</i>	Trapp, E. <i>et al.</i> (eds.) <i>Prosopographisches Lexikon der Palaiologenzeit</i>
<i>P.Oxy.</i>	<i>Papyri Oxyrhynchi</i>

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GREG WOOLF is Professor of Ancient History at the University of St Andrews. His books include *Becoming Roman: The Origins of Provincial Civilization in Gaul* (1998); *Et tu Brute: The Murder of Julius Caesar and Political Assassination* (2006); *Tales of the Barbarians: Ethnography and Empire in the Roman West* (2011); and *Rome: An Empire's Story* (2012). He has also edited volumes on literacy, on the city of Rome and on Roman religion and has published widely on ancient history and Roman archaeology.

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Preface

The starting point of this book was a conference on ‘Encyclopaedism before the Enlightenment’ held in St Andrews in June 2007. That event was generously funded by the British Academy. It was also the opening event in a three-year project in St Andrews on ‘Science and Empire in the Roman World’, funded by the Leverhulme Trust. We are very grateful to both. We wish also to thank Margaret Goudie for her hard work in organising the original conference and Katerina Oikonomopolou, who as well as contributing to this volume has been our collaborator for the duration of the project. Like so many of the encyclopaedic projects described in the pages that follow, this one gathered momentum and scale as we learned more and thought harder about the many questions raised on that first occasion. Some of the contributors to this volume spoke at that conference; others were recruited later. We are grateful to all for their hard work, and especially for their willingness to read and comment on each others’ chapters. Special thanks go to Will West for taking on a particularly large volume of that work, and to our St Andrews colleague Christopher Smith for his comments on chapter 2. We are grateful also to Michael Sharp and the anonymous readers for Cambridge University Press, and to Gill Cloke for all her work on copy-editing. Nearly all quotations from languages other than English are translated, but we have occasionally included untranslated or partially translated Latin quotations in footnotes where we feel that they will be of particular interest to specialist readers. We have used the author-date system in references throughout in accordance with Cambridge University Press house style; some contributors have chosen in addition to include the full titles and publication details of medieval and early modern editions in footnotes for clarity. It was another St Andrews colleague Harry Hine who advised us at the start to focus on encyclopaedism as a phenomenon, not on chasing down encyclopaedias. It was good advice, and we are grateful to him for that and for much else.

1 | Introduction

JASON KÖNIG AND GREG WOOLF

The boundaries of encyclopaedism

What does it mean to talk of ‘encyclopaedism’ before the Enlightenment?

We should make it clear right from the start that this volume does not attempt to trace a systematic genealogy of the ‘encyclopaedia’ as a genre. It is would be hard, in any case, to find anything quite like a modern ‘encyclopaedia’ before the eighteenth century. Instead we are concerned with the much broader phenomenon we refer to as encyclopaedism. We are interested, in other words, in the ways in which a series of different authors (primarily located within western, European culture) made use of a range of shared rhetorical and compilatory techniques to create knowledge-ordering works of different kinds, works that often claimed some kind of comprehensive and definitive status. And we think in terms of an encyclopaedic spectrum, with different texts drawing on shared encyclopaedic markers to different degrees and for very different purposes.¹

The inadequacy of a generic approach becomes clear when we look more closely at the word ‘encyclopaedia’ itself. The belief that this was an ancient Greek word has sometimes been used to link the great compilatory works of the classical world with the encyclopaedias composed by Diderot and his contemporaries. That idea does not stand up to scrutiny. The word ‘encyclopaedia’ first appears in the late fifteenth century.² There is no surviving example of a Greek or Roman author using it to describe his or her own work. Its original fifteenth-century users wrongly believed that it had been used (in its Greek form *enkyklopaideia*) by the first-century CE Roman writers Pliny (*Natural History*, preface 14),³ and Quintilian (*The Orator’s Education* 1.10.1). It has become clear, however, that that belief was based on misreading of the texts, both of which were in fact using the two-word Greek phrase *enkyklios paideia*, meaning ‘general education’ (discussed

¹ This volume is intended to be complementary to the essays in Binkley (1997a), many of which work similarly with the idea of an encyclopaedic spectrum.

² See Blair and West, below (chapters 18 and 23); also de Rijk (1965); Fowler (1997) 27–9.

³ On this passage, see Beagon (1992) 13–16; Naas (2002) 16–18; Murphy (2004) 33–4; Doody (2010) 43–51; and below, chapter 2, p. 48.

further below). As Ann Blair shows in [chapter 18](#), the term *enkyklopaideia* and its Latinate variants increasingly came to be used, from the mid-fifteenth century onwards, to describe compilations linked with educational curricula and compilations organised in such a way as to examine a series of different intellectual disciplines in turn. It was not until the late seventeenth century that the meaning of the word ‘encyclopaedia’ shifted, and came to be applied to a much more modern concept of large-scale, comprehensive compilation. The word ‘encyclopaedia’ may be derived from classical Greek, then, but we cannot for that reason assume an unbroken, unchanging tradition of ‘encyclopaedias’, in the modern sense, stretching back into classical antiquity. That lack of terminological consistency makes it all the more difficult to posit a uniform, cross-cultural notion of an encyclopaedic genre. And that insight in turn has consequences for our understanding of many pre-modern texts: for example, the long history of reading Pliny’s *Natural History* as an ‘encyclopaedia’ in the post-Enlightenment sense has arguably led to a distorted view of its function within Roman imperial culture.⁴

The self-conscious newness of the great encyclopaedias of the Enlightenment should also make us pause before we search for anything similar in the centuries before. The *Encyclopédie*, published in France under the direction of Denis Diderot and Jean Baptiste Le Rond d’Alembert between 1751 and 1772 (in 17 volumes of text and 11 of plates, compiled by multiple contributors) is the most often-cited landmark, although many features of that work were anticipated in other publications from earlier decades, two of the most notable being John Harris’ *Lexicon Technicum* (first edition in 1704) and Ephraim Chambers’ *Cyclopaedia* (first edition in 1727), of which the *Encyclopédie* was originally intended to be a translation.⁵ The *Encyclopédie* in particular is often viewed as an icon of Enlightenment ideals, indeed it is presented very much in those terms in Diderot’s own introduction. Richard Yeo, in his book on Chambers and Harris, writes as follows: ‘Deriving from an ancient classical heritage, the encyclopaedia is also closely linked with the emergence of modernity, with assumptions about the public character of information, and the desirability of free intellectual and political exchange that became features of the European Enlightenment.’⁶ It symbolises ‘the achievements of science and reason’, while also ‘epitomising the success of print capitalism.’⁷ The proliferation of printed books is, for Peter Burke, a

⁴ See Doody (2009) and (2010).

⁵ See Yeo (2001); also Kafker (1981) on these and other predecessor volumes.

⁶ See Yeo (2001) xii for this quotation; and 12 for the importance of communicating with a wide public, rather than accumulating elite knowledge, for eighteenth-century encyclopaedists.

⁷ Yeo (2001) xii.

fundamental precondition of the transformation of educational curricula, libraries and encyclopaedic projects during the sixteenth and seventeenth centuries.⁸ The encyclopaedic compilations of Vincent of Beauvais and Gregor Reisch were among the medieval works printed and widely distributed during the sixteenth century. But the real significance of printing was the enormous increase in the production of books it enabled, forcing scholars to develop more sophisticated mechanisms for ordering knowledge. Diderot and his immediate predecessors both responded to the challenge of printing and took advantage of its capacity to set a new kind of reference work near the centre of the intellectual universe.

Enlightenment encyclopaedism is thus distinguished in part by its novelty.⁹ The decisive shift occurred, Yeo suggests, ‘when observers acknowledged that there was an unbridgeable chasm between the knowledge contained in individual memory and the collective body of knowledge stored in an encyclopaedia’.¹⁰ Old models of fitting the whole world into a single book compiled by a single author were suddenly challenged by new conceptions of knowledge-ordering based on (among other things) specialisation and empirical investigation.¹¹ And those new principles eventually bore fruit in other pioneering encyclopaedic projects of the late eighteenth, nineteenth and twentieth centuries – notably the *Encyclopaedia Britannica*, first published between 1768 and 1771. Yet despite that widely accepted model of a strong break between modern and pre-modern knowledge-ordering practices, surveys of earlier encyclopaedic texts have tended to be interested in them primarily as (imperfect) precursors of what came later.¹² That kind of approach underestimates the variability of encyclopaedic compilation across the two millennia or so before the Enlightenment.

What we need instead is an approach which looks beyond genre to a more flexible mode of categorisation. That is not to say, however, that we should completely discard the notion of a boundary between encyclopaedic and non-encyclopaedic writing. In what follows, different contributors have taken different approaches to that problem. For example, some have given more weight than others to the notion of an encyclopaedic tradition. In the next chapter we argue that the encyclopaedic spectrum model has a particular relevance to the knowledge-ordering texts of ancient Greek and

⁸ Burke (2000) 81–115.

⁹ However, on the disingenuousness of Diderot’s claims about the novelty of the *Encyclopédie*, and his tendency to ignore earlier encyclopaedic traditions, see Clark (1990) 26–7.

¹⁰ Yeo (2001) xi.

¹¹ See Yeo (2001), incl. 9–11 on the influence of earlier, seventeenth-century thinkers, especially Bacon, on these developments.

¹² E.g., see Collison (1966).

Roman culture, and that modern attempts to lump together the works of authors like Celsus and Pliny as members of the same genre go too far: worse, they misapply modern generic categories in a way which fails to capture the original function of these texts within their own cultures. But for other periods, the situation is less clear-cut. Within the western European culture of the medieval and Renaissance periods we do indeed find works which have a strong sense of working within an encyclopaedic tradition, flagging their debt to earlier works of compilation even as they stress their own originality.¹³ Different contributors have also chosen to view the limits of encyclopaedism rather differently: some, for example, have even used the word ‘encyclopaedia’, rather than ‘encyclopaedic’, for the texts they discuss, as a shorthand to signal a boundary between encyclopaedic texts and others which do not deserve the name. Certainly it is clear that encyclopaedism is more than just compilation – we have to draw a line somewhere. But how rigid that dividing line should be is a matter of debate. As editors we have preferred to leave that debate open rather than attempt to impose some false consensus.

That variation in approach should not be a surprise. It is partly a problem of changing vocabulary and cultural variation (more on that below). Different periods use different words for the act of compilation. If we try to translate the words ‘encyclopaedism’ or ‘encyclopaedia’ into the languages of the texts we study, we will search in vain for an exact match. It is quite clear that there are ancient or medieval conceptions which equate roughly to what we find in later centuries and to each other. Those conceptions are similar in significant ways, and make the exercise of juxtaposition and comparison potentially very fruitful, even in the case of compilatory traditions which have developed quite independently of each other. And yet it is desperately difficult, once we have discarded the simplistic notion that Pliny and Quintilian used the word ‘encyclopaedia’ in the same way as we do, to pin down the areas of common ground which matter most. How do we access and interpret the categories pre-modern compilers were themselves working with, and their precise degree of connection with, or disjunction from, their counterparts in other periods? We have to edge our way towards an understanding of their similarities and differences in a tentative and provisional fashion, sensitive to shifting use of language and shifting conceptions over time. No single model of encyclopaedism will work for all periods.

In fact we suggest that part of the fascination of encyclopaedism – even if one agrees on the broad notion of an encyclopaedic spectrum just

¹³ See West (2002) 14–42.

outlined – is precisely the difficulty of knowing how to fix its boundaries.¹⁴ Different chapters in this volume respond to that challenge in different ways.¹⁵ That inconsistency may be frustrating to some readers, but we suggest that it is inevitable, given the range of texts and periods we deal with. We also contend that it is worth risking, as a by-product of the attempt to juxtapose a range of different periods and different cultures, and to look across disciplinary boundaries. It also seems peculiarly appropriate to the subject we are dealing with. As we shall see below, many of the texts we study were acutely aware of the impossibility of the task they set themselves: any attempt to sum up the whole of human knowledge in a single text runs the risk of incompleteness and inconsistency and arbitrariness. Any attempt to define encyclopaedism in a dogmatic fashion for all of the different periods we study risks facing the same accusations.

That productive uncertainty about where exactly encyclopaedism is to be located has shaped the contents of this volume. Many of the chapters which follow are interested in exploring the possibility that encyclopaedism can be found in some very unexpected places. Texts like the ancient collections of wise men's sayings (see Teresa Morgan's chapter), Plutarch's *quaestiones* (Katerina Oikonomopoulou), Artemidorus' collection of dream interpretation (Daniel Harris-McCoy), and Dugdale's *History of Imbanking and Drayning* (Claire Preston) cannot be said to have been central, influential texts for western encyclopaedic writing. In a different collection the likelihood is that some or all of them would go unmentioned; other similar case studies might take their places. Occasionally we even see encyclopaedic motifs and priorities flowing out into other kinds of writing altogether: witness Ian Johnson's discussion of the encyclopaedic qualities of Chaucer's *Canterbury Tales*. We include all of these texts here, not in order to suggest that one cannot study encyclopaedism before the Enlightenment without them, but rather as experiments, vehicles for testing out where the limits of encyclopaedism lie; also as demonstrations of the way in which the rhetoric and techniques of comprehensive compilation left their mark on a remarkable range of texts.

¹⁴ See Fowler (1997) for discussion of the difficulties of definition. For other recent discussions of encyclopaedism in particular periods, all of them offering a rather more rigid definition of their subject, see Ribémont (1997) on the medieval encyclopaedia; Van Ess (2006) on Islamic encyclopaedism; Van Deun and Macé (2011) xiii–xix and Schreiner (2011).

¹⁵ For that reason (also because we realise that some are likely to read selectively, focusing on specific authors or periods) we have left contributors to lay out their own views on the range of different possible definitions of 'encyclopaedia' and encyclopaedism, at the risk of some repetition.

Common ground

There is thus a tension lying at the heart of this volume between similarity and difference, between the common ground these texts share and the idiosyncrasies which distinguish them. The rest of this introduction examines the two sides of that tension in turn.

Our focus throughout is almost exclusively on European and Mediterranean compilation. That is not meant to imply a mutual awareness between all of the different authors we discuss: different strands in the Mediterranean compilatory tradition broke off from each other and developed separately, in distinctive and innovative directions. Nevertheless most of the texts we look at do have some common points of reference, particularly from Greco-Roman literature. That goes even for Arabic encyclopaedism: we include two chapters on Arabic knowledge-ordering simply because it was so much influenced by the Greco-Roman tradition, and particularly by the systematising projects of Aristotle. The chronological order should make it easy for those with interests in particular periods to focus their attention on the areas they are most interested in. We do not aim to be fully comprehensive, but we have tried to make sure that all of the most influential texts and periods within that broad range receive some coverage, along with a selection of less frequently studied compilations. We have started successive clusters with overview chapters (König and Woolf, Magdalino, Keen, Muhanna, Blair), before moving on to more detailed case studies.

The only exception to that European/Mediterranean focus is Harriet Zurndorfer's closing chapter on Chinese encyclopaedism. That chapter is designed to function as a postscript to the rest of the volume, a very provisional test-case, intended to raise questions about how far the model of an encyclopaedic spectrum might be meaningfully extended, even to a culture which has none of the common reference points just referred to. As we shall see, some of the startling similarities between Chinese encyclopaedism as Zurndorfer describes it and its European/Mediterranean counterparts suggest that further comparative work has the potential to be very fruitful.¹⁶

What, then, are the similarities which tie this very disparate body of texts together? First of all, they rely on a spectrum of shared techniques. Note-taking, excerption and recombination, cross-reference (which was later used so heavily by Diderot and his collaborators),¹⁷ the use of contents pages and summaries to aid navigation – all of these techniques emerged in the classical world at least in rudimentary form, and were refined and adjusted in later centuries. Faced with the mass of pre-existing knowledge

¹⁶ Cf. Burke (2000) 30–1. ¹⁷ E.g., see Brewer (2011) 51.

and texts, our compilers had to make selections, and they then had to order their material. Decisions about selection and organisation were at the heart of all encyclopaedic projects. Of course, many of these techniques also characterised texts which even the most *laissez-faire* categoriser would not label as encyclopaedic. Nevertheless, in combination they are central to the way in which most encyclopaedic authors work.

Shared decisions about structure mattered too. Alphabetical ordering is a standard feature of many modern texts which call themselves encyclopaedias, but it emerged relatively late, gaining prominence only in the Middle Ages (there are a few classical predecessors) and only becoming the dominant organising principle in the sixteenth century. Much commoner in earlier centuries was disciplinary organisation, where different sections of the text dealt in turn with different fields of study. We need to be very careful about the assumption that the classical authors who invented that kind of structure – especially Varro and Celsus, whose work is discussed further in the chapter following – would have imagined themselves as part of a wider grouping, or considered themselves to be linked with other authors who did the same. But by the time we get to the late antique world and then, especially, into medieval culture, that Varronian scheme is used as a self-conscious gesture of affiliation to a tradition of totalising compilation. It was important not least through being tied to university syllabuses: seven of Varro's nine subjects (excluding medicine and agriculture) corresponded to the Seven Liberal Arts of the medieval *trivium* and *quadrivium*, the former composed of grammar, rhetoric and logic, the latter of geometry, mathematics, astronomy and music. Varro's schema remained an important influence in the Renaissance too, although it became increasingly common to reject his precise division in favour of a wider range of different disciplines.

Perhaps even more important, however, is the rhetoric of encyclopaedism. That rhetoric focuses above all on comprehensiveness. The ideal was to present a total coverage of the whole of what was knowable, or at least the whole of what was knowable about a particular subject – although, of course, in practice that claim always entails a degree of compression and selectiveness, which reins in and summarises that total knowledge with a view to making it accessible.¹⁸ Pliny's *Natural History* was a particularly important model for the idea of a text which could reflect the world in its

¹⁸ On the idea that comprehensiveness is an important feature of what makes an encyclopaedia, see (among many others) Clark (1992), esp. 107: 'discourse becomes encyclopaedic when it takes as its subject the process of knowing and the body of human knowledge, seeking to represent this body as a unified whole'; Fowler (1997) 8–9; Murphy (2004) 11–12, following Arnar (1990); and many of the chapters below; also North (1997) for the argument that the impression of totality is often more important than literal comprehensiveness, with reference especially to medieval encyclopaedism.

entirety, the whole of nature.¹⁹ Moreover those ideals were often articulated through recurring metaphors. The medieval period, with its guiding image of encyclopaedic compilations as mirrors of the world, is an obvious example.²⁰ The tree of wisdom, through which the connections between every ‘branch’ of knowledge were demonstrated, was another popular figure, and one often presented diagrammatically.²¹ Often there was a competitive edge to this rhetoric, as compilers sought to convince their readers that their own compilations were the most authoritative, the best organised, to be contrasted with less successful attempts. The encyclopaedic works we study were not always welcomed or praised by their readers; we should not necessarily take their own ambitious statements about their projects at face value, as self-evident reflections of their achievement.

Many encyclopaedic texts forestall that kind of criticism by drawing attention to the limitations of their own ability. It is in fact a standard feature of encyclopaedic rhetoric to undermine or throw doubts on its own claims to totality even as it makes them, to reveal the precariousness of encyclopaedic aspirations to comprehensiveness.²² As we suggested above, the ordering work of the encyclopaedist is always in tension with the inherent miscellaneousness of the material he or she²³ must deal with.²⁴ In some cases the difficulty of achieving comprehensive coverage bursts into view despite the encyclopaedist’s best efforts to suppress it; in other cases, the encyclopaedist may even draw attention to that problem quite pointedly and self-consciously.

That kind of self-awareness has sometimes been taken as one of the defining features of the encyclopaedias of the Enlightenment. However, the studies gathered together here show that it was not confined to modern encyclopaedic enterprises. The history of encyclopaedism is littered with abandoned works, or works dreamed about but not even begun; and it

¹⁹ On Pliny, see [chapter 2](#), below, and Beagon ([chapter 4](#)); Naas (2002), esp. 15–67, on Pliny’s aim of compressing the whole of nature into a single work and on his ambivalent relation with earlier conceptions of encyclopaedism; Carey (2003) 17–40, esp. 18–20; also West (2002) 32–41 and Blair ([chapter 18](#)) on Pliny as a model for Renaissance comprehensiveness.

²⁰ See Fowler (1997) 23–4. ²¹ Yeo (2001) 22–32.

²² Cf. Clark (1990), esp. 20–2 on the way in which the encyclopaedic desire for completeness is always ‘shadowed by incompleteness and obsolescence’ (that phrase from Clark (1992) 97).

²³ However, it is very hard to find female compilers within the history of pre-Enlightenment encyclopaedism.

²⁴ Cf. Clark (1992), esp. 101 on d’Alembert’s ‘Discours préliminaire’ to the *Encyclopédie*, which oscillates between the metaphor of tree or map for the encyclopaedia and the metaphor of labyrinth: ‘There is a tension between order and disorder: noise (the great, unorganised heap of proto-information) accompanies the totalising enterprise, just as in memory, forgetting and loss shadow the enterprise of retaining and retrieving the past’.

is common in alphabetical encyclopaedias for the letters towards the end of the alphabet to be treated much more briefly.²⁵ The Enlightenment's new confidence in the possibilities of human reason was combined with a parallel awareness of the precariousness of encyclopaedic ideals, which were stretched to breaking point by (for example) the rapid expansion of knowledge.²⁶ How could the totality of human knowledge be summed up in a single work when each decade brings revolutionary new progress?²⁷ Similar claims are often made now for the encyclopaedic compilations of the late twentieth and early twenty-first centuries.²⁸ The advent of the internet has led to new experiments and rapid changes in the practice of encyclopaedism, especially in the web-pages of Wikipedia and its many imitators. The internet has produced new opportunities and new technologies for ordering and systematising human knowledge; at the same time it has provoked new questions and anxieties about the possibility of doing so adequately, in the face of the vast expansion of information available,²⁹ and in the face of the extraordinary proliferation of editors, whose accuracy and good faith is sometimes dubious.³⁰ By contrast, Richard Yeo has suggested that medieval encyclopaedism tends to be relatively confident about the possibility of collecting the sum of human knowledge into one place, and that it is only with the Renaissance that we start to see problems of information overload. However, he is surely too confident in claiming that 'anxiety about the hubris of the quest for knowledge . . . is a modern phenomenon'.³¹ Several of the contributors to this volume trace anxieties of those kinds back through earlier centuries, and show how they had always been a part of the encyclopaedic world-view,³² even if the earlier material does not quite share Enlightenment worries about the danger of knowledge becoming obsolete, worries which were inevitably less prominent in pre-modern cultures which did not rely on modern conceptions of scientific progress.

Two chapters in particular are important in that respect. William West, first of all, considers the encyclopaedic tradition broadly, with a special focus on the Renaissance, but also looking back to the medieval and classical worlds, and forward to the 'encyclopaedic fiction' of the twentieth century. He stresses that the vulnerability of encyclopaedic ambition, while it may sometimes be carefully orchestrated by the compiler, is often, instead, an inherent consequence of the projects these texts undertake. And he points

²⁵ See Yeo (2001) 4–5 for examples. ²⁶ See Yeo (2001), esp. 59–77.

²⁷ See Yeo (2001) 59–98. ²⁸ A theme of Burke (2012).

²⁹ Cf. Blair (2010) 2–3. ³⁰ See Dalby (2009), esp. 50–81. ³¹ Yeo (2001) 5.

³² Cf. also Blair (2010) on the Renaissance, incl. 14–46 for a survey of similar problems of information overload in classical, Byzantine, Arabic, Chinese and Latin medieval culture.

out that it is above all when we try to read encyclopaedic texts that we begin to see the precariousness of their claims to order and comprehensiveness. That problem, he suggests, is if anything clearer for the pre-Enlightenment world than for the encyclopaedias of Diderot and his immediate contemporaries and successors. Daniel Harris-McCoy offers a close reading of one single text, Artemidorus' *Oneirocritica*, along similar lines. He argues that Artemidorus both draws on, and at the same time deliberately exposes the inadequacy of, the ideal of comprehensiveness as it applies to his own instructions, which are, he stresses, subject to almost endless variation and adaptation according to the different contexts of the cases under discussion. In that sense Artemidorus has a great deal in common with other ancient technical and scientific authors who proclaim the usefulness of their own writings while also making them very difficult to use in practice. Proclaiming the complexity of one's subject matter – too complex to be summed up on paper – has a number of functions in ancient technical literature: it implies that the reader must learn not just by reading but also by experience; it provides an inbuilt defence against failure, allowing one to claim that particular local circumstances have made the case under discussion more complicated than might initially appear; above all, it leaves space for the authority of the expert practitioner, as something which cannot be codified or summed up on paper.³³

It is important to stress, in fact, that such failures of encyclopaedic comprehensiveness need not necessarily be represented in negative terms as things to be deplored or even necessarily concealed. For one thing, comprehensiveness may sometimes be sacrificed in favour of an outline vision of the overall shape of the workings of the natural world, just as we might eschew a close-up of a photo in order to see the whole picture.³⁴ Pliny, for example, several times draws attention to the necessity of leaving things out precisely for that reason, without apparently seeing such omissions as inconsistent with his goal of encyclopaedic coverage.³⁵ Acknowledgement of the precarious nature of encyclopaedic compilation can even be used to bolster the impression of a work's accomplishment. At times it almost seems that an awareness of the impossibility of exhaustive encyclopaedic order makes that goal all the more appealing, as if the encyclopaedist is at his most tenacious and determined precisely at those moments where he can feel the goal of comprehensive coverage slipping from his grasp.

³³ Cf. Barton (1994). ³⁴ See North (1997).

³⁵ See Carey (2003) 21–2 and 23: 'with playful irony, Pliny cites totality as the justification for brevity. But his confession serves not only as a defence, but once again to draw attention to the gargantuan nature of his project' (21) (with reference to *NH* 3.42 and other passages).

Whatever its precise connotations, that risk of failure is something that the encyclopaedists of all ages have always been aware of.

Finally, we see recurring similarities of political context for encyclopaedic compilation, even across very different cultures. Much eighteenth-century compilation was informed by the Enlightenment ideal of an intellectual community stretching across national and cultural boundaries. But many of the great post-Enlightenment encyclopaedic projects, of which the *Encyclopaedia Britannica* is only the most famous, arose from the desire to celebrate particular national cultures.³⁶ More generally speaking, it is a commonplace now to see knowledge compilation in modern European cultures as a phenomenon which was in many cases made possible by empire, for example because of the way in which imperial conquest can bring an influx of new discoveries, which lead to a desire to reassess and reorder the sum of human knowledge (although new discoveries are of course not confined to periods of imperial expansion).³⁷

However, in the pre-modern world systematic political sponsorship of encyclopaedic projects, and even political intervention and control, were often far more conspicuous than anything we are familiar with from modern western culture, where governments and rulers tend to keep the world of scholarship more at arm's length. We see glimpses of the link between compilation and political sponsorship within prefaces which honour wealthy individuals who have commissioned or paid for a work.³⁸ Claire Preston's chapter on Dugdale's history of drainage, dedicated to Charles II, shows how that work conjures up, through its enormous accumulation of antiquarian detail and like many other antiquarian works from the same period, an idealised, patriotic image of the bringing of civilisation to England. In other examples, it is clear that pre-modern encyclopaedic writing was often enabled or encouraged by imperial context, just as it was in modern European culture. Elias Muhanna argues, for example, that the Arabic compilers of the fourteenth century drew on skills honed within the imperial bureaucracy, and benefited from having access, by virtue of their administrative positions, to knowledge drawn from across the Islamic and Mediterranean worlds.³⁹ Pliny's *Natural History* has similarly often been viewed as an imperial project, made possible in part by the influx of knowledge associated

³⁶ E.g., see Yeo (2001) 1, with further references, on the *Encyclopaedia Britannica*; and cf. Van Ess (2006) 4–5 on patriotic encyclopaedic projects in the twentieth-century Islamic world.

³⁷ See König and Whitmarsh (2007b) 4–6 for further discussion and bibliography.

³⁸ For starting points on medieval prefaces, see Binkley (1997b) 78; also Keen (chapter 13).

³⁹ Cf. Heck (2002) for the argument that earlier Arabic encyclopaedism of the ninth and tenth centuries was driven in part by the desire to glorify Islamic civilisation and Islamic empire.

with Roman imperial dominance and by the concentration of books and intellectual communities within the empire⁴⁰ – although in this case the link between text and empire probably says more about Pliny’s techniques of self-aggrandisement than about any actual connection between the two.⁴¹

In other cases again, political involvement seems to be even more important as the single main driving force for great encyclopaedic projects. Hellenistic Alexandria is a case in point: Myrto Hatzimichali deals at some length with the sponsorship of the Ptolemaic royal family. The Ptolemies aimed to demonstrate their own pre-eminence through a systematic project of cultural accumulation designed to present Alexandria as the cultural centre of the Greek world, and centred especially on the institutions of the Mouseion and the Library, which attracted scholars from across the Mediterranean world and led to a vast range of knowledge-ordering publications. Jill Harries gives a remarkable sketch of Justinian’s *Digest* – his collection of laws – as a massive exercise of imperial power over all past, present and future law. Tenth-century Byzantium also saw vast projects of scholarly compilation under the control of successive emperors, as we see in Paul Magdalino’s and András Németh’s chapters. Similar phenomena are visible in the Chinese *leishu* tradition, especially in its earlier centuries, as Harriet Zurndorfer shows (although she also draws attention to the way in which the great eighteenth-century work of Chinese encyclopaedism, the *Siku quanshu*, deliberately ignores the long history of imperial patronage in order to emphasise instead the independence of encyclopaedic scholars over the centuries). The blatant character of pre-Enlightenment political involvement, along with the vast scale of some of these undertakings, which relied on huge teams of scholars (that is certainly not a purely Enlightenment phenomenon,⁴² even though sole authorship is predominant in pre-modern encyclopaedism), is quite startling from a modern perspective. Zurndorfer’s and Harries’ chapters in particular give a powerful impression of the aggressive quality of some imperially sponsored compilations – the way in which they aimed, at least in some cases, to supersede and invalidate all earlier knowledge.

These chapters suggest between them that encyclopaedism may have a special affinity with autocracy and with empire.⁴³ Even if that is the case,

⁴⁰ Cf. Beagon (chapter 4); also Conte (1994) 74–5; Carey (2003), esp. 32–40; Murphy (2004).

⁴¹ Cf. Doody (2010) 40–91 for the argument that models of politically informed encyclopaedism in the modern world have had an undue influence over these views of the political character of Pliny’s text.

⁴² See Kafker (1994b) 392–3 for claims about the originality of Diderot and d’Alembert’s recruitment of a wide body of experts.

⁴³ Cf. König and Whitmarsh (2007b) for one attempt to make similar arguments for the compilatory literature of the Roman Empire.

however, it is important to stress that encyclopaedism rarely celebrates autocratic rule or national mythology in a simplistic fashion. The encyclopaedia, and the encyclopaedist, are rarely straightforward tools of the political world. The encyclopaedic text, almost by definition, contains many voices brought into close juxtaposition with each other; that can often create an effect of internal contradiction as soon as one starts to read closely. No encyclopaedist can make all of his or her material speak with one voice. At times we see compilers struggling to disguise those inconsistencies. Claire Preston shows, for example, how hard Dugdale has to work to suppress the information that his dedicatee's father, Charles I, had in fact contributed very little to the glorious, nationalistic enterprise of drainage which the work celebrates. In other cases we may suspect that encyclopaedic writers are quite deliberately leaving markers of their own independence from the ideals they celebrate and the patrons they serve. As Mary Beagon shows, Pliny represents the achievements of successive emperors as parallel and equivalent to his own heroic achievement of composing the *Natural History*, rather than portraying his own work as straightforwardly in the service of empire and emperor.⁴⁴ Daniel Harris-McCoy argues that Artemidorus' determination to emphasise local identity and local culture in his *Oneirocritica* might be read as a deliberate attempt to resist the globalising assumptions of Roman imperial culture. Even Justinian's grandiose project of claiming autocratic control over the whole of Roman law is, as Jill Harries points out, 'discreetly subverted' in the text of the *Digest* itself, which determinedly hangs on to the principle that jurists, as well as emperors, may be allowed to change the law through interpretation.

There is, then, a great deal of common ground between the texts we study. Some of the similarities are based on their mutual influence, but others seem to be common responses, independently developed, to the challenge of compilation on a massive scale, visible even within the Chinese knowledge-ordering traditions which had only the most tenuous knowledge of their western equivalents.

Encyclopaedic variations

At the same time, there are enormous differences and variations between the texts we study. Works of encyclopaedic compilation have the capacity to project very distinctive visions of the world and its structures – visions of human society, of divine power, of the hidden order lying behind

⁴⁴ Cf. Murphy (2004) 203–9 on the way in which Pliny risks encroaching on his addressee's (i.e. the emperor Titus') imperial privilege as 'arbiter of knowledge'.

the accumulated archive of human knowledge. All encyclopaedic compilations have their own underlying orders and priorities, which may not always be immediately obvious to us. Those priorities vary from one text to another.

That variation is partly to be explained in terms of the different agendas and idiosyncrasies of different authors. It is very hard to generalise about the aims of encyclopaedic compilation. Some encyclopaedic texts were primarily conservative, aiming to control and capture and preserve knowledge; others aimed to do something more radical, opening up new horizons for human understanding and stamping encyclopaedic traditions with their own peculiar approaches; yet others combined both conservative and radical impulses in tension with each other. Often the judgement about how conservative a particular work actually was depends on the eye of the beholder. A good example is Ian Johnson's discussion of the work of Reginald Pecock, whose attempt to construct a new order for the whole of Christian teaching in a way which made it accessible to a lay readership without knowledge of Latin was viewed as dangerously radical within the relatively conservative context of pious medieval encyclopaedism, and led to him being condemned as theologically unsound, stripped of his bishopric and incarcerated.

In some respects it is easier to perceive the overt ordering principles employed in pre-modern encyclopaedic works, simply because most were compiled by individuals, who typically prefaced their work with detailed programmatic justifications and explanations.⁴⁵ Admittedly, ancient and medieval encyclopaedists from Pliny onwards did at times aim for an impression of self-effacement in order to make their own material seem like a natural, self-evident reflection of reality. Nevertheless, our contemporary idea of anonymous, collective composition as the norm is a relatively new one (although see above for important exceptions in politically sponsored pre-modern teams of encyclopaedists). It reaches its height in the multi-authored entries on Wikipedia, whose relatively faceless quality is often deplored by modern critics of web-based encyclopaedism⁴⁶ (despite

⁴⁵ See esp. Beagon ([chapter 4](#)).

⁴⁶ E.g., see Lanier (2006); cf. Rosenzweig (2006), who is ambivalent about the value of the site rather than straightforwardly critical. For a more positive representation of systematic efforts to strip Wikipedia of any kind of biased worldview, see Livingstone (2010). And for a sign that some users at least do see Wikipedia as incurably compromised despite its absence of any guiding editorial force, see B. Johnson (2007) and Dalby (2009) 73–6 on the setting up of a rival site, Conservapedia, whose founders aim to provide a Christian alternative to what they see as the 'liberal bias' of Wikipedia.

the fact that online editors do leave clear traces of their activity, albeit often under pseudonyms, and are accountable within the community of fellow ‘Wikipedians’ to a degree which most casual users of the site would find astonishing).⁴⁷ By contrast, even well into the eighteenth century encyclopaedic works were often published under the name of a single author or editor.⁴⁸

But the implicit ordering principles behind ancient compilations can also be harder for us to decipher in some respects, simply because they are so alien to what we are used to in cultural terms. Careful effort is required to reconstruct the motivations and assumptions lying behind them. Each of the individual encyclopaedic texts we look at is deeply marked by its own time, and by contemporary ideas about the value and proper order of different kinds of knowledge. The superficial continuity of some features of encyclopaedic rhetoric across the ages can mask the fact that different cultures envisaged and justified ideas of totality in vastly different ways.⁴⁹ We need, in other words, to look beyond authorial idiosyncrasy and pay attention as well to cultural variation.

The culturally variable quality of judgements about how knowledge ought to be arranged and what kinds of knowledge ought to be valued has been increasingly recognised, following, among others, the work of Michel Foucault. Foucault’s book *The Order of Things*, first published in French in 1966,⁵⁰ famously demonstrated, with reference to a wide range of scientific writings in many different disciplines, that attempts to classify human knowledge and the world are always arbitrary, even when they claim to be self-evident reflections of the natural world, and that different historical periods are characterised by very different assumptions about what counts as true and authoritative. Those ideas were expanded and elucidated further in Foucault’s later work. Each society, he suggested, has its own epistemic order, and distinctive notions of truth, ‘that is, the type of discourse it harbours and causes to function as true; the mechanisms and instances which enable one to distinguish true from false statements, the way in which each is sanctioned; the techniques and procedures which are valorised for obtaining the truth; the status of those who are charged with saying what counts as true’.⁵¹ With that principle in mind, it becomes clear that even apparently banal or outlandish compilations of knowledge, in the past as in the present

⁴⁷ See Dalby (2009) *passim*. ⁴⁸ See Kafker (1994b) 393.

⁴⁹ See Fowler (1997) 7: ‘The notion of the *omne scibile* is not static; nor are the ways adopted to capture it’.

⁵⁰ For English translation see Foucault (1970).

⁵¹ Quotation from an interview with Foucault published in Gordon (1980) 131.

day, can often be seen on closer reflection to reflect deep-rooted hierarchies and patterns of thought which gave coherence to the cultures within which they were produced.⁵²

Change over time is accordingly a key theme for many of the chapters which follow. Within Greco-Roman culture, as we argue further in [chapter 2](#), Hellenistic Alexandria laid important foundations for later compilation; the late republic and the early imperial period were then crucial to the further development of encyclopaedic compilation. When we turn to the first centuries of late antiquity there was a remarkable degree of continuity in some respects, but this was nevertheless a time when the influence of new Christian priorities began to work changes. Marco Formisano, for example, argues that the move towards a new rhetoric of utility in late antique compilatory writing, and the related reduction in the importance of eloquence, may have been in part influenced by Christian thinking.

Medieval encyclopaedism, too, was fluid and constantly evolving. For all the appearance of a highly conservative, restrictive approach to compilation in this period – focused on transmitting a fixed, authoritative body of knowledge – it is important to be clear about the continuing, dynamic evolution of encyclopaedic principles throughout the Middle Ages. This evolution was partly due to the changing influence of classical models. One key turning point was the thirteenth-century revival of interest in Aristotelian logic, which led to a new rigour and complexity in the ordering – *ordinatio* – of compilatory texts. From that moment in particular there was ongoing and often ingenious experimentation with different frameworks and structuring principles, as different compilers tried out different ways of articulating the God-given order of the world. Elizabeth Keen and Ian Johnson examine a range of different examples in order to illustrate changing principles of compilation, stretching, in Keen's chapter, from Isidore through Hrabanus Maurus and Honorius Augustodunensis to Bartholomaeus Anglicus' *De Proprietatibus Rerum* and fourteenth-century translations of his work.

Harriet Zurndorfer offers a similarly wide-ranging sketch of the changing contours of Chinese encyclopaedism. However, it is the Renaissance chapters which deal with that theme in most depth, shedding light not just on the fact that the landscape of encyclopaedism was constantly shifting, but also, more specifically, on the way in which alternative conceptions

⁵² See König and Whitmarsh (2007b) 6–8 for more extensive discussion, including treatment of some of the limitations in Foucault's view; and more generally König and Whitmarsh (2007a) for a collection which attempts to unlock some of the ordering principles within classical knowledge-ordering texts; also Clark (1992) 96–8 on Foucault on encyclopaedism.

of encyclopaedism repeatedly came into conflict with each other, standing in tension with each other within particular periods or even within particular texts. For one thing, as Ann Blair shows at length in [chapter 18](#), the Renaissance saw a gradual shift away from the notion of encyclopaedism tied to educational curricula towards an ideal of accumulating knowledge across a much broader range of topics.⁵³ Johann Heinrich Alsted's 1630 *Encyclopaedia*, she argues, represented an important step in that direction. However, medieval models of the encyclopaedia as a summary of the 'round of learning' continued to be influential for a long time: works like Gregor Reisch's *Margarita philosophica*, subtitled 'most perfect [i.e. most complete] cyclopaedia of all the disciplines', and last printed in 1583, perpetuated that conception through to the end of the sixteenth century.⁵⁴ Even Alsted's work, for all its modernness, looked very firmly back to the medieval world: it was in effect a neo-scholastic work, whose primary aim was to safeguard the knowledge that had been regained since the Fall;⁵⁵ it too organised its knowledge according to disciplines, albeit with reference to a much wider range of different disciplines than its medieval predecessors; it was also a highly eclectic work, which attempted to synthesise many different approaches to the aggregation of human knowledge, at times with an effect of internal contradiction.⁵⁶

It is important to stress that these shifts were gradual and contested ones. They also had many different causes which often worked together, but in some cases pulled in rather different directions. The Renaissance's discovery of old knowledge and new worlds, and its readiness to interrogate and move beyond familiar authorities or to re-examine old authorities with a new rigour, brought about a ferment of contested notions over how exactly one might go about compressing the world into book form. Scholastic models of unquestioned acceptance of divinely revealed authority were challenged by new humanist rigour. The advent of print culture made possible a much wider public engagement with encyclopaedic writing, and a much richer process of experimentation with various possible models, while it vastly increased the volume of knowledge in circulation. It is surely not fanciful to see the recent proliferation of internet encyclopaedism as a related process, a

⁵³ Cf. Yeo (2001) 16 and 22–7; and McArthur (1986) 74–80 on the slightly later shift towards alphabetical ordering.

⁵⁴ See Yeo (2001) 7 on the popularity of Reisch's *Margarita*; and Blair ([chapter 18](#)).

⁵⁵ See Hotson (2000) 66–73; cf. Yeo (2001) 10–11 for more general comment on the continuing importance of that aim for a number of Protestant encyclopaedists in the Renaissance.

⁵⁶ See Hotson (2000) for a fuller account of the complex range of influences over the extraordinarily prolific work of synthesis undertaken by Alsted in his many publications, esp. 35–9 on his eclecticism.

response to the availability of new knowledge and new knowledge-ordering media.⁵⁷ In the print culture of the Renaissance new models circulated more quickly than they had done before, and the processes of contest between alternative notions became much more widespread. At the same time, however, as Daniel Andersson shows, we also need to look beyond these issues of educational practice and book history to understand the way in which Renaissance encyclopaedism was influenced by new developments in philosophical thinking which had their roots in the sixteenth century.

Two other chapters on Renaissance encyclopaedism, finally, examine the way in which tensions between different models for encyclopaedism played out within particular works and within the reception of particular works. Paul Dover, first, shows how Solinus' *Polyhistor* (a compilation from the third century CE, which drew heavily on Pliny without acknowledgement), after enormous popularity in the medieval period, was increasingly sidelined by Renaissance readers suspicious of Solinus' derivative and, to their eyes, often unreliable use of passages from Pliny's *Natural History*. And yet the text did continue to be published (in many cases with major editorial changes and additions) and read, an indication of the slow pace of change in views on the validity of different modes of compilation, and of the continuing fascination with classical authority even when it was open to challenge from new knowledge. Neil Rhodes, in turn, deals with a rather different tension, between old and new models of the working of the universe. Interest in the old ways of understanding the make-up of the universe continued to manifest itself in encyclopaedic works well after the old geocentric, Ptolemaic model had been thrown into doubt, for example in the encyclopaedic work with which Shakespeare is most likely to have been familiar, *Batman Upon Bartholomew*, Stephen Bateman's (or Batman's) edition of Bartholomaeus Anglicus' thirteenth-century encyclopaedia, which appeared in 1580. Rhodes also shows how the new media of print coexisted and cross-fertilised with older, oral technologies of knowledge transmission, for example in proverb collections. Rhodes sees the institution of the commonplace book mediating between these different traditions; he also shows how they stand in tension with each other within Shakespeare's work. For both Dover and Rhodes, then, old and new ways of thinking about encyclopaedic order coexist and stand in tension with one another for long periods of the Renaissance: the processes of change were always gradual and complex.

Other chapters supplement that kind of sweeping analysis of shifting currents with a more in-depth focus on individual works, aiming to reveal

⁵⁷ Cf. Clark (1990) 20 for the suggestion that encyclopaedism has often flourished at times of social transition, as a response to the challenge of adapting to new forms of knowledge.

the ordering principles which make them distinctive. For many of the texts we study the guiding principles are of course religious ones, especially in the medieval period. Both Paul Magdalino and Erika Gielen for example, attempt to establish a positive, dynamic model of Byzantine compilation, which has often been viewed in negative terms within recent scholarship, showing how it could be a vehicle among other things for projection of distinctive orthodox religious views. Similarly both Elizabeth Keen and Ian Johnson show at length how the compilations of the medieval west could convey very distinctive visions of religious knowledge and divine order. The longest encyclopaedia of the Middle Ages – and after Isidore of Seville perhaps the most influential – was that of Vincent de Beauvais. His vast eighty-book *Speculum Maius* ('The Greater Mirror'), composed in the mid-thirteenth century, is divided into three main parts: the *Speculum Naturale*, *Speculum Doctrinale* and *Speculum Historiale*. The first of those parts deals in turn with the different parts of the natural world in the order in which they were created, according to Genesis 1, a particularly stark example of encyclopaedic order following and celebrating divine order.

It is not surprising, perhaps, that a Christian model of the cosmos looms so large both in Byzantium and in the medieval west. Other contributors, however, dealing with very different social contexts, examine quite different ordering principles. Elias Muhanna and Maaïke van Berkel too – like Magdalino and Gielen – represent their own work in opposition to older scholarship which tended to adopt a negative view of fourteenth-century Arabic encyclopaedism. Both see the provision of cultural capital as one of the key functions of the texts they survey, examining the way in which Arabic compilations could encapsulate the kinds of knowledge required to function as a member of the literate elite of the fourteenth century and linking the rise of encyclopaedic compilation in this period among other things with the expansion of upward social mobility. Harriet Zurndorfer sees similar dynamics at work in the opening up of the Chinese encyclopaedia tradition over the centuries to a wider audience. In other cases, it is attention to pre-modern educational practices, rather than social or religious context, which can give us access to a fresh understanding of these difficult texts. Andy Merrills takes a rather different approach to the seventh-century Latin *Etymologies* of Isidore of Seville, exploring the possibility that the peculiar structure of the work is a sign of Isidore's engagement with techniques of memorisation which were central to education.

In drawing out that kind of underlying logic, many of the chapters in this volume react against older approaches which have tended to denigrate 'encyclopaedism' as a low-status, intellectually impoverished mode

of compilation, characterised by techniques of cutting and pasting which allegedly preclude any exercise of significant originality. For example the term encyclopaedism has become common in academic discourse in recent years largely thanks to Paul Lemerle, who used it in the late 1960s in order to describe the Byzantine culture of compilation in the ninth and tenth centuries, which he characterised in generally negative terms, as backward-looking and lacking in any spirit of criticism.⁵⁸ The chapters which follow aim to show, instead, that encyclopaedic compilations were often much more prestigious and original and influential than that view suggests. For two millennia or more they both reflected and reconfigured successive cultures' understandings of what humankind could know, and of how that knowledge should be ordered and valued.

⁵⁸ Lemerle (1966) and (1971), drawing on Dain (1953); cf. Goff (1994) for appropriation of Lemerle's term to the medieval period. There are other earlier and more positive uses, however: most famously H. G. Wells' advocacy of what he called a 'new encyclopaedism', which he viewed as a revitalisation of modern knowledge-ordering practices to bring them in line with the needs of the modern world: see Wells (1938), and Collison (1966) 17–18 for summary.

PART I

Classical encyclopaedism

2 | Encyclopaedism in the Roman empire

JASON KÖNIG AND GREG WOOLF

Encyclopaedism before Rome

Encyclopaedism was never a genre within classical antiquity. Our argument in this chapter, in line with the model we have outlined already in the introduction, is that we need to think instead in terms of a spectrum of texts which manipulate, to various degrees, and in a great range of different ways, a set of shared encyclopaedic motifs and ambitions and techniques, all of them linked in some way with the idea of comprehensive and systematic knowledge-ordering. We argue, moreover, that the Roman imperial period was particularly important for the development of classical encyclopaedism, defined in those terms. Nevertheless its origins clearly lie a long way back within classical antiquity. We start, therefore, with a brief survey of some pre-Roman compilations. We then move on to a set of general reflections about Roman elite responses to the proliferation of book production in the post-classical world, which we see as one of the key factors in the prevalence of encyclopaedic approaches within Roman culture. From there we turn to discussion of some key imperial authors in turn, starting with Celsus and Pliny and others who stand towards the centre of the encyclopaedic spectrum. Finally we look at a range of other texts, first single-subject compilations and then miscellanies, whose use of encyclopaedic techniques and encyclopaedic rhetoric is more oblique, but nonetheless important for their own self-presentation.¹

As far back as the eighth century BCE, and presumably even long before that, in the centuries during which the Homeric traditions were formed, the rhetoric of comprehensive recording and comprehensive narration was

This chapter owes a great deal to many others in the volume, to the comments of all who participated in the closing session of the St Andrews conference and also to Christopher Smith, who very kindly commented on an earlier draft.

¹ We are indebted to a number of earlier discussions of ancient ‘encyclopaedias’ and encyclopaedism, among them those of della Corte (1946); Grimal (1966); Fowler (1997); Harris-McCoy (2008), whose model of encyclopaedism in Roman culture as a response to anxiety about information overload is particularly close to our own; Doody (2009) and (2010) 42–58; *New Pauly* s.v. ‘Encyclopaedia’ (S. Fornaro and K. Sallmann).

regularly used.² Homer's texts were clearly not intended as encyclopaedic texts in the sense that some later classical authors understood them – in other words as treasure-troves of learning in all conceivable fields of human knowledge.³ To take just one example, Strabo lists Homer first among those philosophers interested in geography, and as the founder of the science:

First of all I must state that we and our predecessors, among whom I include Hipparchos, consider that Homer was the founder (*archêgetês*) of the science of geography: for he has not only surpassed all other men, past and present, in terms of the quality of his poetry, but also in terms of his knowledge of public life. For this reason he did not only concern himself with political life, so that he could become an expert and pass on his knowledge to posterity, but he also became an expert on every place and on the shape of the world as a whole, both lands and seas. Otherwise he would not have gone to the furthest point of the world, enclosing all of them in his account. (Strabo, *Geography* 1.2)

Clearly those claims represent a retrospective co-opting of Homer as a representative of geographical expertise. Like Strabo himself, Homer is represented here as an expert on the whole world: 'on every place and on the shape of the world as a whole'. In fact there is very little sign in the poems themselves, despite their topographical richness, of this kind of systematic geographical coverage. Nevertheless it is clear that the Homeric poems are ingrained with the language of comprehensiveness. Most obviously, they draw heavily on the traditions of catalogue poetry, represented most famously by Hesiod's *Theogony*, which had such strong appeal for archaic Greek culture.⁴

Iliad Book 2 is perhaps the most famous example. In the first half of the book the size and complexity of the Greek army is repeatedly compared to the almost inconceivable, uncontrollable abundance of the natural world. The book opens with Agamemnon, first alone and then in consultation with his fellow leaders. We then cut to a description of the gathering of the Greek army for the assembly in which Agamemnon will test their resolve by trying to persuade them to abandon the campaign against Troy: 'Just as tribes of thronging bees come forth from a hollow rock, always pouring

² Cf. Quintilian, *Institutio oratoria* 12.21–2 for a passage which similarly sees the precursors of Roman encyclopaedism in the classical Greek world, with reference to Homer, Aristotle, Hippias and others.

³ See Hatzimichali in [chapter 3](#); also Kim (2010) for wide-ranging exemplification of the authority of Homer in the Greek literature of the Roman empire.

⁴ Fowler (1997), esp. 3–4, and (1998) has argued that the practice of genealogical cataloguing, which recorded ancestry and family networks, and which left such strong traces in Homer and Hesiod, was a particularly important precursor to the compilatory trends of later classical antiquity.

out unceasingly, and fly in clusters over the spring flowers, some here, some there; in the same way the many tribes marched out in troops from their ships and huts in front of the low beach to the place of assembly' (2.87–93). It looks initially as though the Greek army will succumb to temptation: the assembly nearly breaks down in a rush back to the ships, and here the poet compares the gathering to the waves of the sea in a storm, or a field of crops stirred by the west wind (2.142–54). Finally Odysseus bullies them back into line, and Nestor advises Agamemnon to sort the army into its separate tribes so as to maintain order (2.360–8). When they finally march out to battle, with the temptation of homecoming put aside, the language of awe-inspiring natural abundance recurs, but now with an emphasis on the controlling presence of the Greek leaders. They are compared with 'the many tribes of winged birds, geese or cranes or long-necked swans' (2.459–60) and 'the many tribes of thronging flies which fly around the shepherds' farmstead in the spring' (2.469–71): 'So they stood in the flowery meadow of Scamander, numberless, as many as the leaves and flowers in season... And just as goatherds easily separate their widely scattered flocks of goats when they bring them to pasture, so did their leaders marshal them' (2.467–8, 474–6).

At this point the voice of the poet famously intrudes:

Tell me now, you Muses who have your homes on Olympus – for you are goddesses and you are present and know all things (ἴστε τε πάντα), whereas we know only a rumour and know nothing: who were the leaders and rulers of the Danaans? The masses I could not tell or name, not even if I had ten tongues and ten mouths and an unbreakable voice and a bronze heart within me, unless the Olympian Muses, daughters of aegis-bearing Zeus, were to tell me of all those who came to Troy. Now I will list the captains of the ships, and all of the ships together (νῆας τε προπιάσας). (*Iliad* 2.484–93)

Here Homer's poetic work is equated with the controlling hand of the Greek generals. He too brings the intimidating abundance of the Greek army under control – albeit with divine assistance, and resigning himself to an incomplete account. He lists 'all of the ships' and catalogues the different tribes in turn just as Nestor has advised in his speech to Agamemnon. That kind of equation between the compiler's subject matter and the full richness of nature is one that has a rich afterlife in later encyclopaedic compilation, as we shall see further below for Pliny. Homer may not be a proto-encyclopaedist in his knowledge of geography or agriculture or philosophy, then, but his comprehensive ambitions as narrator and cataloguer are occasionally prominent in passages like this one, and clearly have a great deal in common with later classical compilatory writing.

However, it is not until we get to the emergence of prose literature in the fifth century BCE that we start to see texts which resemble those later compilations more closely. The emerging historiographical tradition is one important strand in that development. For example, Herodotus' coverage of different nations in turn in his *Histories* implies a desire for methodical coverage. The flexibility of his narrative, which allows him to incorporate even remotely relevant material almost without restriction, and yet without losing sight of the overarching structure of the work, contributes to an impression of abundance and even comprehensiveness. His work was particularly influential for the later tradition of 'universal histories' which came into its own in the late republic, as we shall see further below.

Perhaps even more important was the philosophical writing of the sixth, fifth and fourth centuries BCE, although here we have to be careful not to claim too much. The Presocratics, with their interest in understanding the nature of the universe, prefigure (like Homer, but in a very different way) the Plinian fascination with 'Nature' as an object of study. Some of these philosophers individually – most obviously Democritus – covered a vast range of different fields. However, their work is fragmentary and sometimes obscure, and lacking in the kind of programmatic statements which would help us to understand how far they saw themselves as engaged in systematic programmes of knowledge-ordering. The fifth-century sophist Hippias of Elis was famously polymathic. Philostratus tells us that he 'included in his treatises discussions of geometry and astronomy and music and rhythm, and he lectured on painting and sculpture . . . and in Sparta he described the different types of cities and colonies and their activities' (*Lives of the Sophists* 1.11, 495). He was renowned especially for his mathematical breakthroughs. He seems to have written on geographical topics. He compiled an influential *List of Olympic Victors* (Plutarch, *Numa* 1.4). He is said to have written a work called the *Collection* (*Synagōgē* in Greek), although it is not clear what it contained.⁵ He was renowned for having appeared at Olympia before the assembled Greeks in clothing made entirely by his own hands (Plato, *Hippias Minor* 368b–c) – an emblem of his mastery of many different areas of expertise. It is clear that for many he embodied the ideal of the learned individual as a walking encyclopaedia, even though Plato mocks him and represents his polymathy as superficial. What is not clear is how far his publications should be viewed as part of a systematic project of mapping out the different fields of human knowledge: there

⁵ Other key sources include Plato, *Hippias Maior* 285a–286a; *Hippias Minor* 368c–d; and see O'Grady (2008) for overview.

is simply not enough of his work surviving to be sure. There are other philosophical candidates for the title of proto-encyclopaedist in the fourth century BCE. For example, Robert Collison, in his 1966 history of ‘the encyclopaedia’ as a genre, confidently claims that Plato’s nephew Speusippus was the author of the first ‘encyclopaedia’ of the European tradition – although the evidence for that rather speculative claim is exceptionally precarious.⁶

By far the most significant philosophical predecessor to later ideals of encyclopaedic compilation was surely Aristotle.⁷ His work covers an extraordinary range, dealing with biology, anatomy, psychology, physics, meteorology, zoology, and also poetics, rhetoric, logic, epistemology, metaphysics, ethics and political thought.⁸ Some caveats are necessary. Clearly the surviving corpus of his works cannot be described as systematic in any polished way, despite some interlinking (the close interconnection of the *Nicomachean Ethics* and the *Politics* is the best example). Their unity is now taken to reside in a common set of procedures and methods – analytical and expository – that recur throughout the different works, and in those resemblances that emerge from the use of similar concepts – such as teleology – that recur in treatments of distant fields. The problem of discerning Aristotle’s intentions (or the development of his thought) is complicated by uncertainties about the sequence of composition, and by the fact that he seems to have left little in a finalised form. The works that have survived were largely designed in connection with his teaching, even if they were used in other ways soon after his death. Moreover Aristotle’s encyclopaedic qualities are as much a consequence of his work’s reception as they are of his original intentions. The emphasis on a broad conception of philosophy was characteristic of Aristotle’s Peripatetic successors as much as Aristotle himself.⁹ Commentary on his work became a major field of scholarly activity in the early empire.¹⁰ This was renewed by Porphyry’s Neoplatonic appropriation in late antiquity. Aristotelian texts were central to the reception of Greek science under the Abbasid Caliphate:¹¹ one legend had the translation movement itself inspired by the appearance of Aristotle to the Caliph in a dream. Greek commentaries like that of Alexander of Aphrodisias and Porphyry’s

⁶ See Collison (1966) xiii and 22 for that claim; Guthrie (1978) 457–69 for an account of what we know of his work; and Diogenes Laertius 4.4–5 for a list of some of his titles, which suggests that he was very prolific on a great variety of subjects, but gives no good reason to think of his writing as particularly comprehensive or systematic.

⁷ Cf. Grimal (1966) 460–1; also Vegetti (1990) for discussion of Aristotle and his pupils in relation to the concept of encyclopaedism.

⁸ On Aristotelian polymathy see Labarrière (1997). ⁹ Hadot (1997).

¹⁰ On the development of Roman interest in Aristotle see Barnes (1997). ¹¹ Gutas (1998).

introduction were also translated, to be eventually supplemented in the twelfth century by Arabic ones.¹² Aristotelian commentary was also important in twelfth-century Byzantium, and vital to the slightly later intellectual revival of the western Middle Ages, which followed on from the rediscovery of his works in the twelfth and thirteenth centuries.¹³ A principal concern of scholars in each period was to eliminate inconsistency and establish a rational order of genuine works. Catalogues (*pinakes*) were allegedly produced by Andronicus, probably around the turn of the millennium, and certainly by Ptolemy in the second century CE. The ordering of works in the latter suggests an attempt to disengage an architectonic order underlying the whole body of work: logic, ethics and politics; then poetics and rhetoric; then physics and psychology; then biology; and finally metaphysics.¹⁴ Aristotle's later reputation as a systematising thinker is not necessarily a good reflection of the underlying conceptions of his work. And yet despite all of those qualifications it is hard to deny that Aristotle's works do often seem to gesture towards a vision of what a systematic account of all branches of human knowledge might look like. In the words of Jonathan Barnes 'systematisation is not achieved in the treatises, but it is an ideal, ever present in the background'.¹⁵

The scholarship of the Hellenistic world drew heavily on that Aristotelian heritage. The third century BCE saw a vast explosion of knowledge-ordering activity in Alexandria in particular, partly encouraged by the Ptolemaic royal family, and the extension of systematising techniques of compilation to new areas, most famously in the work of the Alexandrian literary critics, whose groundbreaking work then in turn had a formative influence over the later encyclopaedic tradition. Myrto Hatzimichali gives a detailed account of those processes in the chapter following, showing how often the texts of that period are ambitious for comprehensive and systematic coverage, so we will not go over the same ground here. Even in those centuries, however, it is hard to find any single attempt to compress the whole of human knowledge into a single work or tightly connected body of works. Scholars like Callimachus and Eratosthenes covered a bewildering range of different topics in different works, but with no signs of any systematic attempt to connect them. It is not until Rome appears as a power in the eastern Mediterranean that we start to see the world compressed into a single book.¹⁶

¹² Cristina d'Ancona in *Encyclopaedia of Islam* (3rd edition), s.v. Aristotle and Aristotelianism.

¹³ See Keen in [chapter 14](#). ¹⁴ Barnes (1997) 32–3. ¹⁵ Barnes (2000) 62.

¹⁶ Cf. Fowler (1997) 17–19, who similarly sees the kind of encyclopaedism which attempts full coverage of the world in a single text as a Roman idea, hard to parallel in full in the Greek tradition.

The classical bookworld

What then made the late republic and the early empire so distinctive as fruitful grounds for encyclopaedism? One obvious approach would be to explore the connection between acquisition of territory and acquisition of knowledge: in the classical world, as in modern European history, both of those activities have been characteristic of imperial cultures.¹⁷ Another would be to point out, as others have done before, that Roman encyclopaedic writing was motivated in part by the desire to appropriate Greek knowledge, to sum it up and package it neatly with the eye of an outsider, in a way which was not necessary within the Greek educational tradition where it could be assimilated in a more organic fashion.¹⁸ Here, however, we want to address a rather different issue. Our argument in this section is simply that the increase in encyclopaedic writing in the Roman world was a response as much as anything to the proliferation of available written material. With that context in mind, we then turn to more specific discussion of Celsus and Pliny and other key landmark texts.

The Augustan poet Horace begins the second of his epistles in this way:

Dear Lollius Maximus,

While you give speeches at Rome, I have been at Praeneste, reading the author of the Trojan War, who teaches us what is good and what is bad, what useful and what not far more clearly – and more reliably – than do either Chrysippus or Crantor. If you have a moment to spare, listen to why I have formed this view. (Horace *Epistles* 1.2)

As this passage suggests, Horace's world was a world of books. This is true not just in the sense that Horace's reputation, his influence at court and his personal fortune had been won by his ability as a poet. More materially, Horace inhabited a world in which collections of papyrus scrolls were among the most valued prestige objects kept and treasured in the villas of the aristocracy. Precious copies of rare texts were lent to the friends of their owners, sometimes to be copied out by expert slaves, and access to private collections and libraries was granted to a privileged few. Praeneste, one of the hill towns to which the Roman elite retreated from the summer heat, was a typical location for such collections. Only one of these collections has survived even in part, that of the Villa of the Papyri at Herculaneum,¹⁹ but these private collections were the vital hubs of scholarly life in the

¹⁷ Cf. König and Whitmarsh (2007b); Murphy (2004) on Pliny; and further discussion above, pp. 11–13.

¹⁸ See Wallace-Hadrill (1988). ¹⁹ Sider (2005); Zarmakoupi (2010).

late republic.²⁰ Cicero, in an earlier generation, held his collection at the town of Tusculum where he also had access to the villa of Lucullus which contained a library stocked with the plunder of eastern palaces.²¹ Kings and great cities like Carthage had been accumulating books and libraries in the Hellenistic age just as they had accumulated collections of sculpture and bronzes. Horace's ultimate patron, the emperor Augustus, later presided over the creation of great libraries in the city of Rome too.

Those physical scrolls gathered in their hundreds, and very occasionally in their thousands, were a tangible sign of the central presence that literature had come to occupy in the cultures of both Greek-speaking and Latin-speaking elites during the Hellenistic and Roman periods. The early education of Rome's ruling classes consisted very largely of intensive programmes of reading classic books, followed by exercises in memorising them and in producing speeches based on them. Private reading of new compositions was one of the exclusive diversions of the Roman aristocracy and the court.²² A wider social circle must have had some acquaintance with the content of literary works to appreciate the mythological referents of public architecture like Pompey's theatre, and the dramas performed during civic festivals.²³ The social importance of literature and literary culture had been central to the collective definition of the Roman elite for more than two hundred years.²⁴ Visiting Greek lecturers had drawn crowds from the second century BCE. During the middle of the first century BCE, many young aristocrats completed their education with a tour of the Greek world, including visits to the philosophers of Athens and Rhodes. As adults they would pepper their speeches and letters with allusions to their reading. This is an extraordinary (if not quite unparalleled) fact in a society with pre-modern literacy rates and in which the physical creation of books was both laborious and expensive. Our picture of a very literate elite has been filtered by the priorities of court intellectuals like Horace in the *Art of Poetry* and Suetonius in his biographies of poets and emperors, and no doubt many Roman aristocrats had much less interest in such pursuits in adulthood.²⁵ But no aristocrat or emperor could safely disdain literary culture, and a surprising number of literary compositions come not from talented specialist clients like Horace (or Martial or Statius) but from civic aristocrats,

²⁰ On libraries and the classical bookworld see also the companion volume to this collection, *Ancient Libraries*: König, Oikonomopoulou and Woolf (2013).

²¹ Dix (2000). ²² On all this, Fantham (1996); Dupont (1997); Habinek (2005).

²³ Among many studies of the literary facility of the Roman aristocracy see especially Bloomer (1997); Cameron (2004).

²⁴ On these developments see Habinek (1998). ²⁵ Woolf (2003).

knights, senators and indeed emperors. All this activity depended on a shared familiarity with a set of widely known foundational texts, studied at school, frequently alluded to, easily recognised, often copied, whether respectfully or parodically: in effect, a canon. No texts were as canonical as those attributed to ‘the poet of the Trojan War’, Homer. That shared culture of books-once-read-and-never-forgotten is what we shall refer to as a bookworld.

The rise and fall of the book is one of the great themes of ancient cultural history. The development of encyclopaedic writing needs to be set against this narrative. A detailed account of ancient book production, circulation and loss remains beyond us, but the following sketch must be broadly correct. Numerous peoples in the ancient Mediterranean world and beyond had been employing alphabetic writing since the ninth century BCE. Books were a more recent invention, with prose (which concerns us most) appearing later than books of verse. Prose works written on papyrus first appeared in Greek in the later fifth century BCE, and in Latin not until the early second century BCE. The first reliable evidence for private collections, and for some form of a trade in books in classical Athens, is contained in chance remarks by Aristophanes and Plato. Philosophical and medical writings, histories and the works of sophists were among the first produced on a large scale. By the end of the fourth century, Aristotle had reputedly created a large collection in the Lyceum. During the third century BCE the royal library at Alexandria was said to have contained between 200,000 and 500,000 scrolls.²⁶ That figure is certainly a wild exaggeration, and it is most plausible to imagine a library with tens rather than hundreds of thousands.²⁷ Yet even this total marks a scalar change in the classical bookworld. Most were presumably of poetry. Callimachus’ catalogue of the library in the mid-third century BCE, the *Pinakes*, ran to 120 scrolls and already offered a classification by subject matter and genre as well as biographical and bibliographical notes on the authors. The explosion of book production had been phenomenally quick. The most influential period of canon-formation – the stabilisation of the Greek bookworld – was also roughly contemporary with Callimachus. Estimating the rate at which new books were written after this point is extremely difficult. One set of estimates of the number of new Greek works dateable to each century has suggested a tripling between the sixth and the fifth century BCE, followed by a slower rise peaking in the fourth and third centuries, before a decline over the last two centuries BCE and the first two

²⁶ On all this see Reynolds and Wilson (1974) 1–36; Cavallo (1975); Knox and Easterling (1985); Goldhill (2002).

²⁷ Bagnall (2002).

CE.²⁸ The Latin bell curve would have been even more compressed, since it is conventional to see book production in both languages slowing around the end of the second century CE, to be followed by a smaller late antique boom. Such figures are enormously problematic. They conceal the rise and fall of genres with different periodicities: medical writing in Greek, for example, or juristic texts in Latin. A great proportion of the works we know of are known from citations in just a few very late encyclopaedic works, such as the *Digest* of Roman law,²⁹ or the geographical dictionary of Stephanus of Byzantium, both written under the sixth-century Byzantine emperor Justinian. Yet this dimly perceived arch of rise and fall is the necessary background against which the history of ancient encyclopaedism has to be written, even though encyclopaedic works were late arrivals on the shelves. It means that the late republic and the early imperial period were times of great bibliographical proliferation, which must at times have seemed daunting and even overwhelming. These are precisely the periods when experimentation with new forms of encyclopaedic compilation reached its peak, as we shall see in the section following.

For encyclopaedism is, for the most part, a secondary species of book creation, like criticism and commentary. It is an activity which depends, in most of its manifestations – and bearing in mind our earlier caveats on the importance of its origins in the oral culture of Homer and the original researches of Aristotle – on the existence of books. For practical reasons, encyclopaedists need access to many earlier works to gain material on which to impose their chosen order. Rhetorically, the claims for completeness, comprehensive cover and wider reach are most powerful in implicit comparison to other books that are less complete, partial and specialised (or at least constructed as such). The works we categorise most readily as encyclopaedic are the ones which stood out for their claims to greater authority, greater completeness and more comprehensive order. Many also stood out for their greater size and rarity, leviathans among the schools of bibliographic minnows.

The products of the ancient bookworld often stress their own allegiance to a harmonious body of already established knowledge. At the same time, however, they also often make clear how that harmony is threatened by the continued expansion of human knowledge. We see glimpses of both of those strands even in the brief opening sentences of Horace's letter. He sets his own engagement with the bookworld within a long tradition. He and

²⁸ Figures from note 1 of MacMullen (1982). The estimates were based on the first edition of the *Thesaurus linguae graecae* canon which at that point extended only to 200 CE.

²⁹ See Harries, chapter 8.

Lollius are represented as embodying conventional contrasts, of rhetoric versus poetics, of *officium* as opposed to *otium*, of a busy life in the capital versus more measured philosophical reflection outside it. Those themes would echo through Latin literary production to late antiquity, for they are central to the self-definition of any elite that defines itself *both* by education *and* by political function. But for Horace's first readers the dichotomies would perhaps have recalled more than anything the philosophical treatises of Cicero, where busy Rome finds a counterpart in the philosophical debates at his villa in Tusculum, with its garden expressly designed to recall Plato's Academy in Athens. The idea of Homer as an authority on ethics also has a long earlier history, as far back as Plato. We have one good late republican parallel for that claim in a Greek treatise *On the Good King according to Homer*, composed by Cicero's approximate contemporary Philodemus and recovered from the already mentioned Villa of the Papyri on the outskirts of Herculaneum in the Bay of Naples, another tranquil and literary anti-type of Rome.³⁰

Horace also acknowledges his dependence on past authority, as do many of his contemporaries, by representing the process of engagement with earlier authors as almost personal in quality.³¹ His readers are expected to recognise (or perhaps just to know that they *should* recognise) Chrysippus and Crantor. Both were, in fact, eminent philosophers, one Stoic, the other an Academic. Horace implies that the world of ethical debate was conventionally structured by rival philosophical schools. These were in origin real schools with actual geographical locations, working libraries, teachers and students. Their successors survived in Athens until they were closed by the Byzantine emperor Justinian in 529 CE. But already by Horace's day the schools were also metaphors for provinces of the bookworld, a world in which Homer, Crantor, Chrysippus and Horace coexisted in timeless proximity. Philodemus' villa had contained not only a great private library of Epicurean philosophy and poetic criticism, but also statues of Hellenistic philosophers and kings. The bookworld is an imaginary place, a construct created and shared by the educated, whose possession of it made them into an imaginary community of sorts.³² Horace and his readers were well aware

³⁰ Murray (1965); Gigante (1995).

³¹ Cf. König (2012), esp. 41–52, for the importance of that idea in Roman imperial culture more broadly.

³² There are obvious resonances with Anderson's notion of an imaginary community to describe the effects of the mass readership of novels and newspapers in an age of print capitalism, on which see Anderson (1991). But the different conditions of book production in antiquity limited the scale of ancient imagined communities, and determined that they were based less on shared appreciation of developing narratives and events, and more on the collective contemplation of slower-moving issues, such as literary value and ethics.

of the historicity of the founding fathers: the ‘timelessness’ of debate was an artefact deliberately created, a classicising move that claimed transcendent value for the work of a moment, setting philosophical life in a different time to that of lived experience. But all this is easy for us to understand because we have created similar bookworlds ourselves. Horace, like us, uses the shorthand that he reads an author (rather than the texts produced by one) and also that the author can teach (rather than his teachings being extracted by the reader’s active engagement with texts that he wrote). This is the same sort of game as when philosophers initiate debates between, say, ‘Kant’ and ‘Wittgenstein’, or social theorists imagine the different positions ‘Marx’ and ‘Weber’ might take on a given proposition. Just like our bookworld, theirs offered a map of knowledge, not just a set of key facts but a well-ordered universe, structured by key texts and their authors, the latter sometimes brigaded by school, teachers or place. Bookworlds are tidier, better-ordered worlds than any possible real world inhabited by authors, readers and their actual, material books. That is part of their attraction.

And yet these images of harmonious engagement with the authors of the past often stood in tension with an awareness of the problems brought about by bibliographical proliferation. Horace’s invocation of Homer makes clear the role of the classics at the centre of the Roman bookworld. But Horace does not expect his readers to take him at face value in claiming that Homer is sufficient, as the allusion to Hellenistic philosophers makes clear. Besides, Horace’s ‘letter’ is itself part of an unfolding book of verse which makes implicit claims about the value of continued book production on precisely those issues on which Horace affects to have found the last word in Homer. One of the challenges of the ancient bookworld is its constant expansion. The more books that exist as repositories of knowledge and argument, the greater the problems of recovering information from them, and deciding on issues of authority. Where do we look for a specific nugget of information? Where do we find an authoritative answer to an ethical dilemma when there are so many alternatives? Do we need to read Crantor and Chrysippus, or can we trust Horace on them? Soon there are too many books for any one person to read. How should the educated person decide what to read, what to ignore? Those historians and anthropologists who have assigned literacy a key role in the development of reason, science and social progress have pointed to the capacity of writing to record one generation’s discoveries for posterity in a form open to revision and criticism.³³ However, the practice is often more confusing than that idealistic vision implies. Even those who set

³³ For criticism of these views, Street (1984); Thomas (1992).

out to combat these problems through their scholarship sometimes ended up adding to them. Hellenistic Alexandria is a case in point: there, under the patronage of the Macedonian Ptolemies, scholars attempted to fix, once and for all, the text of much-copied (and so, miscopied) Homer, along with something like a canon of Attic dramatists. The result was the birth of textual criticism and also, apparently, of library cataloguing in the Alexandrian Library.³⁴ Yet their activity also multiplied the number of books, making the problems in some senses more acute.³⁵ A mass of critical editions joined the mass of variant texts, universal histories joined the local chronicles, and historiographical polemic sought to control readers' responses to other texts.

Encyclopaedism may be seen as one among a number of strategies formed in reaction to the growth in the number of texts and the ensuing struggles for authority. There were of course other possibilities. The rise of specialist custodians and exegetes of various kinds, in Alexandria and elsewhere, has just been mentioned. Most obvious, perhaps, was the creation of a discourse contrasting writing with orality, which accorded a special authority to the oral. The Homeric poems offered a tantalising – if inevitably textualised – glimpse of a simpler world. Nostalgia for a world without books is well known from Plato, and from endless later iterations. Perhaps, just as pastoral idylls seem especially attractive to societies undergoing rapid urbanisation, so a nostalgia for orality is especially a feature of those living on the edge of a mushrooming world of books. No ancient encyclopaedist could ever hope to create as comprehensive and authoritative an account of the world as that encoded in Homeric epic.

Encyclopaedism was nevertheless a powerful alternative. The encyclopaedic writing of the Roman empire addressed the fragmentation of knowledge and the collapse of the authority of books by reuniting, within a single text or set of texts, materials otherwise scattered through many others. Many of the texts considered in this volume implicitly opposed the kinds of fragmentation created by specialisation; that is, they brought together material that was the subject of different emergent *disciplinae* and the professional knowledge of different *artes*. Nevertheless there is a real range of variation here which it would be misleading to underplay. At one extreme are those texts that claim to cover the whole of one single subject: Theophrastus on plants, Verrius Flaccus on etymology, and Diodorus on history all come into this category. At the other end of the continuum are works that were so varied in content that their miscellanistic nature seems

³⁴ Cf. Hatzimichali, [chapter 3](#). ³⁵ On all this, Stock (1983).

their defining quality. They, too, were made possible only by the growth of the bookworld. The ancient texts that are most often identified as encyclopaedic sit midway between these two poles – between complete guides to a single subject, and works that make their diversity a positive virtue. But there is no easy way to separate out this middle category. All of them share the same basic techniques of gathering, sifting and compiling, and much of the same rhetoric of comprehensive coverage. In the sections following, we look first at those Roman imperial works which stand in the middle of the spectrum, before turning to the two poles of specialist single-text works and miscellanies.

In addition to the goal of uniting scattered material, one programmatic claim often made by encyclopaedic works of many different types is that their projects will eliminate error, repetition and the inconsequential, leading to better understanding. Naturally this is more aspirational than actual. Yet by imposing an order, encyclopaedias opposed the growing incoherence of the bookworld. And on the basis of the vast efforts involved in their production, the heroic exercise of compilation and discrimination, the enormous practical difficulties of organisation and presentation, they claimed authority.

Ancient encyclopaedism was not, to be sure, simply a remedy for abundance, nor did it generally represent abundance in negative terms. Compilers may have claimed that the mass of books in existence was unmanageable, yet their work often seems to celebrate that abundance, revelling in the mass of works consulted, in the length and difficulty of their researches, and above all in the rich hoard of marvels and information that they had gathered for display. Encyclopaedic ventures were thus great celebrations of the riches of the bookworld, virtuoso performances of wide erudition and cunning arrangement. To different degrees, they catered to a taste for the marvellous highly characteristic of the age.³⁶ Equally, the sheer scale of some encyclopaedic projects made them stand out physically in the book collections of antiquity. Varro's masterpiece, *Antiquities Human and Divine*, comprised 41 books, his work *On the Latin Language* comprised 25, his account of the liberal arts, the *Disciplines*, was in 9 books, his account of law in 15, and so on. His total output was well over 500 books. Pliny the Elder's *Natural History* ran to 37 books, and his total output was over a hundred.³⁷ We often know these totals even for works, like most of Varro's, that have not survived, because they were reported as indices of the grandeur of these

³⁶ On which, see recently Bianchi and Thévenaz (2004); Hardie (2009).

³⁷ Pliny, *Epistles* 3.5.

projects, and the erudition of their authors. Some kind of connection seems to be made in these *testimonia* between polymathy, a prodigious output, and what we might consider encyclopaedic works. Even if we might want to make sharper distinctions between these three phenomena, the common strands are clear enough. Encyclopaedic compilations were at once instantiations of the bookworld and epitomes of the world of knowledge, models of the learning that one person might hope to accumulate and also great possessions through which an author or owner might advertise his exceptional standing as a virtuoso reader and critic, a hero of the bookworld.³⁸

Landmarks of encyclopaedism in the late republic and early empire

How far back can encyclopaedic compilation be traced within Roman culture? Very little survives of the first century or two of Latin prose writing, indeed very little before the age of Varro and Cicero. Even for the late republic our coverage is quite patchy. No doubt if we had more of the *exempla* of Cornelius Nepos, a contemporary of Varro, or those of Hyginus, the freedman in charge of Augustus' Palatine library, or indeed of the scholarly works of their predecessors and contemporaries, a fuller picture would emerge.³⁹

Clearly, however, the idea that Latin literature followed the same path as Greek, in evolving naturally from primitive verse to more sophisticated genres, should be treated with considerable scepticism.⁴⁰ When the leading men of Rome decided, less than a century after Callimachus' cataloguing of Greek books, to create a Latin literature, they did so by commissioning a thoroughly Hellenistic suite of genres. What we know of the earliest Latin books suggests they were as allusive, learned and polished as any contemporary work in Greek. It is possible, indeed, that the very first prose works in Latin were encyclopaedic in conception. That claim has been made for some of the works of Cato the Elder from the first half of the second century BCE. Here, however, we are held back by their very patchy survival: Cato's works have come down to us only in tiny fragments. Cato certainly ransacked

³⁸ Beagon, [chapter 4](#).

³⁹ On which see Horsfall (1982). The best overall account of the mass of lost antiquarian scholarship of this age remains that of Rawson (1985). See also (more briefly) Conte (1994) 209–24, 386–93. For the work of Verrius Flaccus see now Glinister *et al.* (2007). On Pliny's claim in *NH* preface 33 that the practice of using a preliminary table of contents was introduced by Valerius Soranus see (and for much else on excerpting and cataloguing) Henderson (2002) 274–8.

⁴⁰ Hinds (1998), e.g. 52: 'Roman literature is already thoroughly Hellenised from the earliest period to which we have access'.

Greek histories to produce his *Origines*, documenting the prehistory of the Italian peoples, and perhaps also when he was composing his lost book of educational guidance for his son, *Ad filium*. But although we have many sections of the former, little is known about Cato's method in composing it, and scepticism has grown about the encyclopaedic nature of the latter,⁴¹ which had formerly often been taken as the first Roman 'encyclopaedia', to match the unsubstantiated claims made for Speusippus and others as originators of the 'genre' in Greek.⁴²

We are on slightly firmer ground with Varro, whose writings date from the mid-first century BCE, but even in his case we depend heavily on speculation. Varro's *Disciplines* have not survived and their contents – beyond books on medicine and architecture – are controversial. Older views represent him as offering a Roman version of a Greek canon of liberal arts, of the kind we find in so much of the later medieval tradition. However, the existence of that canon before late antiquity has been called into question, and in any case we know very little about the overarching structure of Varro's work.⁴³ Perhaps the precise contents of this potential 'lost encyclopaedia' matter less for our purposes here than the recognition that much of Varro's output evidently made use of the kinds of encyclopaedic methods of excerpting and compiling and restructuring which are prominent in the later texts we discuss further below.⁴⁴ Not much more of the *Antiquities* has survived than of the *Disciplines*. Only 70 fragments, most very short, attest to its phenomenal influence and use as an authoritative work of reference as late as the fifth century in the west and even later in the eastern empire. However, we know a little more about its organisation, in part because its architectonic account of Roman religion was a convenient target for Augustine in the *City of God*.⁴⁵ The first of the forty-one books outlined the structure and plan of the whole, making clear that the first half would be devoted to *res humanae*, the latter half to *res divinae*; it perhaps also contained an account of his sources. Then followed six books on people (*de hominibus*), six on places (*de locis*), six on times (*de temporibus*), and six on things (*de rebus*); together comprising a capacious account of Roman institutions and culture, derived from historical research yet not organised as a narrative. There followed the books on religious affairs, divided again into an introductory book followed

⁴¹ For full discussion see appendix 8 of Astin (1978); also Gratwick (1983) 138–41. For an account of the debate see Doody (2010) 42–58.

⁴² E.g., see Collison (1966) xiii and 23.

⁴³ For the controversy see Hadot (1984); Shanzer (2005).

⁴⁴ For a general appraisal see Horsfall (1982); also Sallmann in *New Pauly*, s.v. Varro.

⁴⁵ On the reconstruction of the structures of the *Antiquitates* see Jocelyn (1982). Useful comments also in Tarver (1997).

by groups of books on people, places, times, rituals and gods. The scale and design certainly suggest a systematic, methodical approach on an enormous scale.

But of all the Roman authors whose work has in the past been commonly identified as ‘encyclopaedic’, only two survive fully enough for us to attempt a detailed assessment and a detailed comparison. Those authors are Celsus and Pliny the Elder. Their works are very different.

The *Arts* of Celsus were composed in the reign of Tiberius (14–37 CE). It seems likely that he structured his work with Varro’s coverage of a range of different fields in mind. Only the eight books devoted to medicine survive, but the work as a whole also included five books on agriculture and apparently also groups of books on war, on jurisprudence, on philosophy and on rhetoric. On the face of it this seems an idiosyncratic mixture of specialised technical knowledge and high culture. However, the best clue to the unity of Celsus’ conception is in the preface to the medical books that begins by linking agriculture (the subject of the preceding books) and medicine as two fields of clear and complementary utility: ‘Just as agriculture provides food to the healthy, so medicine gives health to the sick’ (Celsus, *On Medicine*, preface 1). At the centre of his work is not a model of the universe but a conception of knowledge in practice, of means by which humans, if suitably educated, can most effectively and usefully intervene in the world. That instrumental view of knowledge is one which recurs often in later compilatory writing, including Pliny – although in his case the rhetoric of utility is more ambivalent, since he often seems anxious about the consequences of human agency.

Also striking is Celsus’ heavily book-centred model of encyclopaedic compilation. He begins his medical section by laying out the planned division of subject matter between books: opening with an account of the whole was also a feature of Pliny’s *Natural History* and Varro’s *Antiquities* as well as of numerous historical works. He offers a highly ordered view of the subject, beginning with the history of medicine, which passes rapidly over primitive knowledge of herbs and the myth of Aesculapius, to Homer, inevitably his first historical authority. The art of medicine proper, however, he considers as starting with medical texts rather than medical techniques: once again the shape of knowledge is conceptualised in terms of the growing bookworld and its divisions. This leads him at once to a taxonomy of treatments, distinguishing dietetics, the use of drugs, and surgery. Each style of treatment, he claims, represents the preference of a particular ‘school’ of medicine. Celsus does not pick sides but aspires to follow a middle way, and uses the tripartite distinction primarily as a framework for organising his material. Discussion

of the debates over the legitimacy and utility of vivisection and dissection of humans leads Celsus to a (by now familiar form of) programmatic apostrophe: 'Since all these things have been discussed in many volumes and gone over in great debates among the doctors (*medici*), all that can be done is to present what seems closest to the truth.'⁴⁶ Celsus too, then, like Pliny (as we shall see in a moment), finds the quantity of existing literature overwhelming at times; Celsus too perseveres with his project despite or even because of that. And yet his reaction to that challenge is rather different from Pliny's, not least because he is usually more content to follow the structures of disciplinary knowledge used by other writers before him.

The medical books individually are ordered along similar lines. References to a smallish canon of Greek authors, especially Asclepiades and Erasistratus and behind them the Hippocratic corpus, are firmly subordinated to the plan of the whole. It follows that Celsus has annotated and excerpted and classified his notes before writing, rather than letting one or more Greek text shape his work at each point. The dominance of Greek texts among his source material also generates one prominent motif, and that is a persistent concern to explain Greek medical terminology. Nevertheless Celsus tends to take a relatively passive approach to his sources. Although he does occasionally contradict his Greek authorities, his attitude to them in general is less aggressive or complex than that of Pliny, nor does he seem to have a systematic project of Latinisation, to be compared with Cicero's approach to philosophical language in the *Tusculan Disputations*.⁴⁷ He does not seem concerned to enter into the medical debates as a Latin peer: much of the second part of the work consists of long lists of remedies, of advice or ailments. Nor is Celsus interested in making any original contribution to the understanding of the normal functioning of the human body; he seems more interested in the opportunity medicine offers him for a variety of inventories, many of them presumably taken from earlier works. Celsus is typical, then, in his ambitious engagement with the richness of the bookworld, but also quite distinctive in the contours that engagement takes, and quite different from Pliny whose attempts to reshape the bibliographical resources he inherits are much bolder, as we shall see now.

Pliny's enormous *Natural History*, composed in the late first century CE, had much in common with the works of both Celsus and Varro. It shared with them, and with the other texts we have been talking about, an ambition for comprehensive coverage, and many of the same techniques of note-taking and re-ordering. But it was also highly idiosyncratic in some ways.

⁴⁶ Celsus, *De Medicina* preface 45.

⁴⁷ On which Gildenhard (2007).

Most obviously it avoided their division by intellectual discipline. Arguably it had no successors in antiquity. In that sense it illustrates perhaps better than any other text the implausible nature of claims that there was an ancient ‘genre’ of encyclopaedia.⁴⁸

Even in his preface it is clear that Pliny sidesteps the impression of working within a pre-existing tradition. As often in Latin literature,⁴⁹ his claims to generic affiliation took the form of signalling particular works he intended to surpass and supersede, projects with which his own might be (favourably) contrasted. However, the selection of non-predecessors the preface offers is a very varied one, without any close link to a single genre.⁵⁰ It opens as follows:

Libros Naturalis Historiae, novitium Camenis Quiritium tuorum opus, natos apud me proxima fetura licentiore epistula narrare constitui tibi, iucundissime Imperator (‘The books of the *Natural History*, a new work for the Camenae of the citizens of Rome, which I have given birth to very recently, I have resolved to address to you, most gracious emperor, by this rather presumptuous letter’). (*Natural History*, preface 1)

Those opening lines allude (in the title *Historia*) to historical researches⁵¹ yet also to epic in the invocation of the deities known as the Camenae (who had been used as Roman equivalents to the Muses by Livius Andronicus, writing in the third century BCE, and by many other Latin writers afterwards). History and epic share greatness of theme and scale. But in what follows a whole series of Latin poets and prose writers are invoked – including Catullus, Lucilius and Cicero, Cato and Livy, Virgil and Varro – as if to bolster a more general claim for a place in the Latin canon. When Pliny does explain his choice of title he cites, as models he has *not* followed, a series of Greek miscellanies with titles such as *The Meadow* and *The Cornucopia* and also Roman texts entitled *Antiquities*, *Examples* and *Arts*, allusions respectively to the compilatory works of Varro, of Nepos (or just possibly Hyginus), and of Celsus and also what sounds like a Latin miscellany, the *Lucubrationes* (*Studies by Lamp-light*) of Bibaculus.⁵² Taken together, this cumulation of allusions presents *The Natural History* first as a great work on a great theme, secondly as a new Latin (and so Roman) classic (newness

⁴⁸ For forceful arguments along similar lines, see Doody (2010), esp. 42–58.

⁴⁹ On this technique, Hinds (1998) 52–98; Conte (1994).

⁵⁰ On the preface, see Howe (1985); Doody (2001); Carey (2003).

⁵¹ Probably the most natural reading in Latin, although the Greek term had been used in the more general sense of investigations since Plato, and *historia* is used in this sense in some Latin philosophical texts.

⁵² Preface 24.

which is emphasised especially by the word *novicium*, which can mean ‘recently discovered’, ‘recently invented’, or even in some contexts ‘new-fangled’), and thirdly as work that has at its heart the explication of the rational order of the universe, rather than simply an erudite display of its infinite variety.⁵³

We do not need to take these claims at face value, but this is as close as Pliny gets to describing how his own encyclopaedic project relates to previous literary texts. And it is striking here that he pointedly avoids portraying this as a text that can be summed up within existing generic categories. Grandiose as it sounds, this is not like claiming to engage in the same task as, let us say, Varro and to do it better through greater diligence, wider reading and personal knowledge, or through the addition of more up-to-date information. That sort of claim is common enough in more fixed genres – epic and satire, for instance, or in prose genres such as geography and universal history.⁵⁴ It is striking that Pliny neither claims a set of Roman predecessors whose crude efforts he will improve, nor does he claim to be the first to domesticate a genre existing only in Greek.⁵⁵ Nor was Pliny’s work explicitly claimed as a model by any Roman successors, although he was widely read and used. Gellius discussed Book 7 alongside the works of Greek paradoxographers.⁵⁶ Solinus drew on him for a great part of his *Collection of Memorable Things*, but organised his work as a tour of the world, on a similar scheme to the chorography of Pomponius Mela, rather than following the original Plinian structure. Macrobius borrowed anecdotes on subjects that interested him. Isidore mined the *Natural History* for materials for his *Etymologies*. However, each of these appropriations was a matter of the decontextualisation and recontextualisation of facts or anecdotes. What was never borrowed was Pliny’s overall design.

What was that design and what made it so distinctive?⁵⁷ The *Natural History* as a whole, as described in its first book, purported to offer a

⁵³ The overt project is, however, in constant tension with the work’s use of a range of alternative orderings and priorities: cf. Conte (1994) 67–104. On Pliny’s fascination with marvels see Naas (2002), especially 243–92 and 327–93.

⁵⁴ For historians’ claims along these lines, see Marincola (1997) 240–4. For the trope that new conquests have made possible greater (or more comprehensive) knowledge, see Polybius, *Histories* 3.57.2–3, Strabo, *Geography* 1.2.1 and even Arrian, *On Hunting with Dogs* 1.4.

⁵⁵ For this kind of claim, see Cicero, *Tusculan Disputations* 1.1–6.

⁵⁶ Gellius, *Attic Nights* 9.4.13–16.

⁵⁷ For recent characterisations of the whole see Beagon (1992); Conte (1994) 67–104; Carey (2003) 17–40; Naas (2002); Murphy (2004). Although the emphases differ – for example in their assessment of the prominence of Roman imperialism in the design – these works are broadly in agreement about the nature of Pliny’s work and his intellectual and cultural affiliations.

compendious account of the entire world. After a preface dedicating the work to Titus and describing its scope, the first book outlines the plan of the whole and lists the sources consulted, separating Greek from Roman authors. The second book presents a model of the universe, the stars and the earth within it. Books 3–6 comprise a geographical survey, organised as a *periplus* of the world, ostensibly synchronic and focused on the physical world, although humans and history constantly intrude.⁵⁸ Book 7 is devoted to the human race, a virtuoso blend of biology and paradoxography.⁵⁹ Books 8–11 cover the rest of the animal kingdom, divided into creatures of the land, the sea, the air and insects. Books 12–17 cover trees of all kinds, and Books 18–19 deal with crops. Books 20–32 list the medical uses of various plants, flowers, trees, herbs, and animals. Books 33–4 bring Pliny to the physical world, specifically metals. The famous account of craft and art is contained in Books 35–7, which also deal with stones and jewels.

Less explicitly, the *Natural History* placed at its centre the human animal and the Roman empire. This gives the work a double unity, the first deriving from a well-ordered account of the physical and biological cosmos, one that owes a good deal to Stoic, and before that Platonic, philosophy; the second deriving from the consistency of Pliny's ethical, historical and political concerns. That second structure manifests itself in the repeated references to topical (as opposed to timeless) subject matter which Pliny threads through his discussion of the natural world, and particularly in Pliny's own repeated authorial interjections. Over and over again, for example, he comes back to the theme of man's proper, and improper, use of animals, plants and stone,⁶⁰ or to the beneficial and corrupting effects of Roman empire. For that reason, Pliny has been widely regarded as representative of the thought of his age, and also of the moral preoccupations of a particular segment of the Roman aristocracy – although that point should not be taken to undermine the fact that the *Natural History* is still a unique undertaking.⁶¹

Admittedly, there are moments where he seems to resemble Celsus in his relatively passive approach to his source texts. Many of Pliny's choices about what to include on a page-by-page level were determined by what he found in earlier writing. Even though there is a clear and systematic model of the universe underlying the overt and primary organisation, we may presume that it was the amount already written on each subject that determined the space given it in the work as a whole. Medicine and agriculture are treated at such length, for example, because they had been a major focus of Greek, and

⁵⁸ Evans (2005). ⁵⁹ Beagon (2005).

⁶⁰ Wallace-Hadrill (1990). ⁶¹ Cf. Doody (2010) 11–39.

more recently Roman writing. However, Pliny was not unthinkingly dependent on earlier authors in what he chose to cover. Although he included a good deal of material on Roman history and institutions in passing,⁶² these subjects were excluded from the implicit aspiration to comprehensive coverage, despite the mass of information available. There are also moments where the impression of an ordered design is undermined: a discussion on the medical uses of metals is found in Book 36 rather than in the medical books, an account of the German tribe of the Chauca appears in Book 16 on trees, and so on. The impression we have is sometimes of an improvisational work, conceived according to a grand conception but without each tiny individual element having been mapped in advance.

Despite all of those caveats, however, there is a remarkable impression of coherence underlying the vastly disparate subject matter: at the centre of his work was a concept of nature which limited as well as ordered and coloured his encyclopaedic project,⁶³ and which sets him apart from the ordering principles we find in Celsus and Varro.

Common features

The authors examined in the previous section have often been taken as the most important ‘encyclopaedists’ of the late republic and early imperial period. But one of the things this sketch shows is just how varied ancient encyclopaedism could be. Each of the texts we examine has its own distinctive agendas, its own particular ways of fixing totality on paper, which shine through on closer inspection behind the surface similarities.

Nevertheless some common features have emerged.⁶⁴ Among them are shared techniques of knowledge-ordering. The technique of laying out the contents of the work or of individual books within it in advance has already been mentioned. Crucial also were common techniques of note-taking. Pliny did not find his master-plan in anything he read, then, nor was it

⁶² E.g., Ramosino (2004); Bispham (2007).

⁶³ On its specificity see Beagon (1992). Also important is Naas (2002) 69–105.

⁶⁴ Of course that claim needs to be made cautiously, with due recognition of the hazards of trying to corral very different texts anachronistically into a single genre. That kind of procedure is forcefully criticised by Doody (2010), e.g. at 58: ‘We gain nothing by discussing Pliny’s *Natural History* in the context of the lost works by Cato, Varro or Celsus, and what we lose is considerable. We lose our sense of the peculiarity of the *Natural History* in its original context’. We are heavily indebted to Doody’s discussion in this chapter, but we would not want to go so far: our solution is not to separate Pliny from Varro and Celsus, but rather to see them all as part of a much wider group, including many other texts as well (more on those in the sections following).

reproduced in the many compendious works that made use of his. Nevertheless, his techniques of knowledge-compilation clearly did have precedents. That is perhaps most obvious of all for his method of composition. Pliny's nephew records his uncle constantly listening to books read out, and having notes taken of striking facts.⁶⁵ The method was aided considerably by the use of slave secretaries (*notarii*) who were probably skilled in a form of shorthand invented over a century before by Cicero's slave secretary, Tiro. Pliny's notes were gathered up into notebooks (*commentarii*) which were apparently in existence for some time before their arrangement into the final work, since he claimed that he could have sold them, well before then, for 400,000 sesterces. On his death in 79 CE he bequeathed to his nephew 160 notebooks of excerpted material, each sheet covered on both sides with tiny writing.⁶⁶ The method was not invented by Pliny. It looks very much as if Varro too used a system of notebooks of this kind.⁶⁷

Just as important was shared rhetoric. For one thing, the authors in question represent themselves as heroic explorers of the bookworld, bringing back precious nuggets of information and organising them in a rational fashion for the benefit of fellow Romans.⁶⁸ Like all heroic explorers they rarely mention those who accompanied them on their journey – in this case, educated slave readers and note-takers; nor the power differentials that facilitated their expeditions – in this case, the wealth and leisure of the imperial ruling class, and the libraries and scholars brought from defeated nations to Rome. Repeatedly they emphasise moral concerns, but most of all they stress the service they render others by their acts of compilation. Celsus' constant reference to utility is one version of this motif. We have suggested above that Pliny has a less optimistic view of the usefulness of the knowledge he presents us with. However, he too represents his own work, albeit in different ways, as a kind of benefaction, as we shall see in Mary Beagon's chapter below. This does not mean that the works they created were easily usable as storage devices from which readers might rapidly retrieve particular items of information,⁶⁹ even though their use of rudimentary tables of contents and summaries and cross-references made tentative gestures in that direction. The greatest compilations were more like universal exhibitions of the spoils of bibliographic wars of conquest: connections

⁶⁵ Pliny, *Letters* 3.5; cf. *Natural History*, preface 17–18 for Pliny the Elder's own (slightly less eccentric-sounding) account of his own industrious reading.

⁶⁶ Pliny, *Letters* 3.5.17 for both of those claims.

⁶⁷ For a short but subtle discussion, see Horsfall (1982), 287–8. See also below on the preface of *On Agriculture*.

⁶⁸ Cf. Beagon (chapter 4) on Pliny. ⁶⁹ Doody (2001).

between Pliny's work and triumphal and monumental displays have often been made.⁷⁰

Also important in drawing together these diverse texts are the metaphors applied to them. Two stand out in particular – images which are taken from two other modes of reconstituting the fragmented worlds of knowledge and authority created by this growth of book production. One is the ancient library, the other the notion of a general education. Both modes offered metaphors for encyclopaedic compilation. Both were also connected with encyclopaedic projects in practical ways.

The role of libraries in organising a world of books seems obvious enough.⁷¹ The Hellenistic scholars Callimachus, Eratosthenes and Hyginus are early examples of librarian-compilers. Libraries had self-evident practical importance for encyclopaedism. When Pliny the Elder boasted of having consulted some 2,000 volumes in the course of his research, it is difficult to imagine this being possible using only books he owned or borrowed. Diodorus and Dionysius of Halicarnassus make it explicit that their works required library research in Rome. Before them, Polybius, in exile, had used books brought back as plunder by Aemilius Paulus from the royal libraries of Macedon. Cato must have used similar resources. Libraries also offered a common metaphor for the compilatory effort.⁷² Diodorus and Apollodorus used the title *Bibliothēke* for their own compilations, as did the Patriarch Photius in ninth-century Byzantium. A frequent claim to utility made in programmatic passages is that readers will no longer need to obtain or read so many books.⁷³

The second metaphor is the much-debated image of general education, most often personalised in the ideal of an individual of comprehensive knowledge. That ideal applied, naturally enough, only to the social elite, although comprehensive education was not necessary for elite status – instead it was one of several competing possibilities.⁷⁴ One (much-discussed) Greek formulation for this ideal was *enkyklios paideia* ('general education'). As we have already seen in [chapter 1](#), the use of that term by Roman compilatory authors is not a gesture of affiliation to some

⁷⁰ Carey (2003); Murphy (2004); Beard (2007).

⁷¹ These issues are explored also in the companion volume to this one, *Ancient Libraries*: König, Oikonomopoulou and Woolf (2013).

⁷² For a full discussion of this theme see Too (2010); and see Fowler (1997) 23 for a similar point about the importance of library as metaphor.

⁷³ E.g. Diodorus, *Bibliothēke* 1.3.5–8; cf. Pliny, *Natural History* preface 33, for the related claim that the table of contents will prevent Pliny's imperial addressee, and other readers, from having to read the whole of his own work.

⁷⁴ For a parallel argument about literary expertise at Rome, see Woolf (2003).

proto-genre of the encyclopaedia: it is never a genre term in the ancient world. Nevertheless it does play an important role in articulating the underlying ideals of some of these texts. To be more specific, the phrase *enkyklios paideia* referred to the balanced combination of core subjects in Greek education, which might include literature, rhetoric, grammar, astronomy, music, geometry and logic, sometimes also philosophy, but most often not (since philosophy tended to be represented in ancient culture as an overarching, higher-level discipline, to which all others were subordinated).⁷⁵ It denoted, in other words, the range of learning that was necessary for a basic level of cultured educational attainment, cognate with other idealisations of *paideia* and so with the ethic of the *pepaideumenos*, the person of education. The most obvious contrast is with the uneducated: in this sense the ideal operated as a class marker, but a secondary opposition is with a highly specialised or technical education, that of the expert. Education in this sense then is amateur but comprehensive, based on a superficial understanding of astronomy, mathematics, music, geography and many other scientific subjects, alongside the literary canon, history, linguistics and so forth, but without a detailed or exclusive knowledge of any of these.

Encyclopaedic works might take their title and organisation from an educational syllabus, as perhaps did Varro's *Disciplinae* or Celsus' *Arts*. The educated man could thus be figured as a walking encyclopaedia as well as a walking library.⁷⁶ And this ideal of an educated person lies behind many encyclopaedic works. Ideal is the key term here. No Roman mind might ever encompass the contents of the *Natural History* – even Pliny needed all those notebooks. Nor is it easy to imagine any aristocrat mastering all of Celsus' *Arts* – medicine and warfare, agriculture and jurisprudence – at least not to any very high level. Yet Vitruvius had already in the last decades of the republic proposed a similar ideal education for an architect, one that included skills in writing, drawing and mathematics, optics, accountancy (arithmetic applied to budgeting) and geometry; history, philosophy and music (especially acoustics); medicine (in relation to climate), law and astronomy.⁷⁷

Perhaps the inexperienced will think it a marvel (*mirum*) that humans can learn and retain such a great number of different subjects. But when they realise that all disciplines connect to all others and have points of contact with them, they easily realise that this is in fact quite possible. For a comprehensive education (*encyklios enim disciplina*) is made up like a single body out of all its component parts. This

⁷⁵ See Morgan (1998) 33–9.

⁷⁶ On the latter image, see Too (2000).

⁷⁷ Vitruvius, *On Architecture* 1.1.3–18.

is the reason why those who are trained in different skills from a young age come to recognise the same characters in all their subjects, and the interconnectedness of all disciplines. For this reason they learn everything more easily. (Vitruvius, *On Architecture* 1.1.3–18)

What better expressions of this ideal could there be than Celsus' *Arts* or Pliny's *Natural History*? Perhaps it is better to see the *disciplinae*, thus deployed, as functioning like landmarks, marking out a landscape of the knowable and useful, of things in which a man ought to take an interest. Celsus and Varro are sometimes treated as the key texts in the encyclopaedic tradition, particularly because of the influence of their disciplinary conceptions of knowledge-ordering over the medieval world, by comparison with Pliny's more idiosyncratic work. However, that perspective underestimates the importance of the educational context for Pliny too. In fact he goes further than either (at least in their surviving works) in making that connection explicit, actually invoking the concept of Greek education: 'my aim is above all to treat of all those things which the Greeks include in their general education (*enkyklios paideia*)' (preface 14 – although it is important to stress that Pliny's precise meaning in this passage is obscure and much debated).⁷⁸

Libraries, encyclopaedic compilations and the idealisation of a comprehensive education were thus mutually supportive responses to the potential for fragmentation and incoherence entailed in the growing world of books. These three themes are also brought together at the conclusion of the last book of Quintilian's *The Orator's Education*, where he defends his ideal of the orator as someone who should be knowledgeable on all subjects, rather than simply a specialist.⁷⁹ In listing exemplary polymaths from the past, Quintilian, like Horace, takes Homer as his first example 'in whom there is no art in which we may not find either perfect accomplishments, or at least certain traces of his knowledge of it' (12.11.21). He goes on to praise Hippias, Gorgias, Plato and Aristotle. Alongside these examples provided by antiquity, he offers a list of four Roman intellectual giants:

Consider Marcus Cato, at once the greatest of generals yet also a wise man, an orator, a writer of history and of law, and the most expert guide to agriculture. Somehow among all those military expeditions and those great domestic disturbances, and

⁷⁸ For a subtle discussion of this, see Beagon (1992) 13–16. We do not mean to imply that the reference to *enkyklios paideia* is an attempt by Pliny to assert his membership of a 'genre' of encyclopaedic writing; see Doody (2010) 43–51 for excellent discussion of the hazards of that kind of approach; also for the possibility that standard readings of this sentence are wrong, and that Pliny is in fact differentiating his own work from the normal contents of Greek general education.

⁷⁹ Quintilian, *Institutio oratoria* 12.11.21–4.

despite the primitiveness of his age and his own declining years, he learned Greek as if to prove to mankind what old men can achieve when they set their hearts on it. And think how much – almost everything in fact – Varro passed on to the world. What qualities of the orator did Cicero lack? What more can I say, when even Cornelius Celsus, a man of modest intellect, could write not only about all these arts but also left behind accounts of military science, agriculture and medicine: indeed he deserves, on the basis of this design alone, to be thought to have known all things. (*The Orator's Education* 12.11.23–4)

Are Cato and Varro, Cicero and Celsus people, or are they books? Quintilian introduces them as individuals who demonstrate the possibility of actually realising his ideas. Yet their works are precisely those which have most often been claimed as Roman encyclopaedias. As men and as books, they are figures for authority and comprehensiveness.

Single-subject works

That attempt to sum up some of the features these authors have in common raises again the question of how we deal with the two poles at either end of our knowledge-ordering spectrum – single-subject works and miscellanies. By comparison with Varro and Celsus and Pliny these two types of text have rarely been given detailed attention in previous accounts of ancient encyclopaedism. And yet it is clear that they often share in many of the common features just outlined: these shared features are not just characteristics of a small encyclopaedic core, but in fact leave their mark on many different areas of imperial prose writing. We therefore look now at both of these categories in turn, in order to illustrate further the difficulty of isolating any firm encyclopaedic genre: we need to think of ancient encyclopaedism rather as a cluster of different approaches and claims, which different texts make use of to a greater or lesser degree.

In looking at single-subject works, the first thing to stress is that even the most exhaustive of encyclopaedic works will necessarily be selective. Pliny's work is an obvious example: as we have already seen, his aspiration to give exhaustive coverage of 'nature' leads him to be quite cursory about some topics, for example history and politics. He covers all there is in the world, but his conception of what exactly that totality might involve is very different from the solutions of others.

It is also striking that some encyclopaedists themselves wrote single-subject works in addition to their more comprehensive texts. Varro is a case in point. His dialogue *On Agriculture* was composed in the 30s BCE. This work is at the more specialised end of our spectrum but in terms of methods

and their exposition there are clear connections to be made with his other more wide-ranging works. Varro lists among his sources more than fifty Greek writers on farming; then a 28-volume account written by Mago in Punic; then a synoptic work in Greek composed by Cassius Dionysius of Utica, which summarised Mago in eight volumes and added material from Greek writers up to a total of 20 books; and then a six-volume abridgement of these by Diophanes in Bithynia to which Varro finally contrasts his own three-volume work which will be based in equal parts on his experience, his reading and on what he has heard said.⁸⁰ These three volumes will contain, he has already asserted, all that needs to be known: ‘Therefore I shall compose for you three handbooks to which you can turn if you ever wish to discover, in any particular case, what you ought to do as a farmer’ (1.1.4).⁸¹ How seriously his claims can be taken is difficult to establish – the dialogue is peppered with odd puns, and allusive humour. But the list of authorities looks like a good precedent for Pliny’s own first book, which consists solely of the names of those works and authors he had used for each subsequent book of the *Natural History*. And Varro’s programmatic statement certainly gives a sense of the mass of texts already available in the last century BCE on some subjects, and the resultant pressures to collate, synthesise, epitomise and reorder the material they contained. His use of these techniques, along with his rhetoric of exhaustiveness in the claim that he is systematically covering all eventualities, has a strongly encyclopaedic feel. It would surely be wrong to see a clear dividing line between this text and his other more properly ‘encyclopaedic’ works.

One type of single-subject writing particularly stands out for its claim to a sort of totality, and that is the subgenre of ‘universal history’: works which attempted to fit the whole of world history into a single text, and which became particularly prevalent in the late republic, even though their roots lie earlier in the Hellenistic period.⁸² The imagery of comprehensiveness is ingrained within ancient debates about the origins and proper composition of universal history. These texts were regularly held up as being in opposition to local histories, biographies, and accounts of particular wars and the like. Diodorus claimed Herodotus as the founding father, while Polybius attributes the origins to Ephorus in the fourth century BCE.⁸³ Diodorus’

⁸⁰ Varro, *On Agriculture* 1.8–10.

⁸¹ *quocirca scribam tibi tres libros ad quos revertare, siqua in re quaeres, quem ad modum quidque te in colendo oporteat facere.*

⁸² Rubincam (1997); Clarke (1999b); Liddel and Fear (2007).

⁸³ On the dispute, see Alonso-Núñez (2003). The key passages are Diodorus, *Library* 11.37.6 and Polybius 5.33.2.

comment is placed at the end of his narrative of the Persian War, and states that Herodotus began from the events of the Trojan War and wrote down almost everything that happened in the shared (*koinês*) known world. This claim seems exaggerated to modern writers. Herodotus' geographical scope was limited to areas conquered or attacked by Persia, although he certainly had access to a good deal of information on the west from the work of Hecataeus of Miletus, whose *Periegesis* was divided into two books, one on Europe, the other on Asia and Africa. Nor was Herodotus' coverage of events between the Trojan and Persian Wars comprehensive. It seems more likely that Diodorus was opportunistically seeking an early and distinguished predecessor of his own work, which he terms *koinê historiê* and which began with origin myths of all the peoples of the known world. Polybius on the other hand writes of Ephorus as being the only one really to have written about everything (*ta katholou graphein*) for all that others claim to have done so, when in fact they cover great events in just a few pages (Polybius, *Histories* 5.33.2).

There are other parallels too with the works we have named above as landmarks of the encyclopaedic method. Some of those are parallels in breadth of content. Pliny allowed historical events and personalities into his text; conversely universal histories often branched away from their historiographical aims to include ethnography, geography, ethics and much else.⁸⁴ For these purposes Herodotus was indeed a model, and similar claims might be made for him as were made for Homer by Strabo, that he extended his narrative to provide an account of the entire world, one that brought out its physical, ethnic and moral structure. Those dimensions of his work were quite likely powerful inspirations for those Hellenistic historians who chose a more encyclopaedic path.⁸⁵

There is also some methodological convergence with the work of Pliny and others like him. Writing these texts involved note-taking, collation, and reorganisation of more or less the same kind as did all the compilatory writing of the Roman empire. It is not surprising, perhaps, that the introduction of a standard division of book-rolls, with a heading for each book, was introduced by Ephorus and that later writers, including Polybius and Diodorus, were so concerned with questions of organisation.⁸⁶ Diodorus of Sicily is again a case in point. His forty-book complete history of the world from its mythical beginnings to the time of composition at the very end of the republic was entitled the *Library*. His use of the imagery of

⁸⁴ Clarke (1999); Woolf (2011). ⁸⁵ See the suggestive comments of Murray (1972).

⁸⁶ Rubincam (1997); and see also Fornara (1983) 42–6 on this and other aspects of Ephorus' innovations and his influence on later universal history.

the ‘library’ in his title brings him closer to Pliny, marking him out as an unusually ambitious user of the vast literary archive. Diodorus explains how he had become enthused by history,⁸⁷ but realised that all his predecessors had written accounts of individual wars or states, or had covered narrow periods of time, or left out myth or recent history, and in particular they had been deterred by the scale of the task from writing a single narrative. The dates and the events themselves were scattered in a variety of books written by many different authors, to the point that the narrative was impossible to grasp or remember. Diodorus goes on to say that his own work was planned as a response to this situation, and that he had resolved to undertake the immense labour of reading all the works of other historians, collating their results and presenting them in one work that might be usefully consulted by others.

It is not easy for those who propose to make their way through the works of so many historians, first of all actually to find all the books they need for the task, and then, given the disparity in nature of these works as well as their great number, to achieve a clear understanding of the past events in question. (Diodorus, *Library* 1.3.8)

Pliny the Elder’s claims for the *Natural History* (and his own heroic research in its compilation) are very similar.⁸⁸ Moreover the claim to be making life easier for the reader is supported in both cases by similar use of navigational aids. For example, Pliny’s table of contents right at the start of his *Natural History* is paralleled by Diodorus’ summary of his work in his general preface, and by his inclusion (inherited from the practice of Ephorus already mentioned above) of a preface at the beginning of each book summarising what lies ahead.⁸⁹ Both Diodorus and Pliny also use a similar system of cross-referencing, of a kind which is unusually detailed by comparison with what we find in other ancient texts.⁹⁰

Miscellanies and *exempla*

At the other end of the spectrum we find a whole raft of compilations normally termed miscellanistic, and also texts in the (related) *exempla* tradition, which collect narratives designed to illustrate moral or practical lessons. In the latter category, the best known example is the *Memorable Deeds and*

⁸⁷ Diodorus, *Library* 1.3. ⁸⁸ Beagon (chapter 4).

⁸⁹ See Rubincam (1997) 132–3; see also above on similar techniques used by both Varro and Celsus.

⁹⁰ Rubincam (1997) 133–4.

Sayings of Valerius Maximus, a Tiberian writer whose writing was used by Pliny. His preface begins as follows.

Of the city of Rome, and of foreign peoples, those deeds and sayings that are worth remembering, and which are too widely dispersed in other books to be found quickly, I have resolved to select from the most famous authors and to arrange, so as to save the effort of a long search from those seeking particular examples. I have no ambitions to be comprehensive. Who in any case could cover the events of the entire past in a reasonable number of volumes? Or who in his right mind could hope to pass on the entire sequence of domestic and foreign history set down by the fortunate pen of our predecessors, either with more care or more striking eloquence? (Valerius Maximus, *Memorable Deeds and Sayings* preface)

Valerius Maximus' short work is not normally considered encyclopaedic, but there are good reasons to think of it at least partly in those terms.⁹¹ Certainly it is systematic. The anecdotes and sayings are carefully arranged by topics, such as religion, or the institutions of ancient nations, or the wonders of nature. Within each category Roman examples precede and are separated from foreign ones. A separation of Roman from foreign (or Greek) was a common ordering principle, reflecting the overt claims to biculturalism of the Roman elite.⁹² His programmatic claims of utility may be compared too with those made by Diodorus and Celsus and Pliny.⁹³ Perhaps the most obvious encyclopaedic feature is the (Homeric) claim that comprehensive coverage is not to be expected:⁹⁴ in what other context would such an apology have been necessary? The overarching principles and aims of the collection are disputed, but the claims of moral utility and the rhetorical use of striking *exempla* in school declamations together suggest a general connection with elite education.⁹⁵

The miscellanistic tradition is larger and more diverse – also in some cases harder to discuss, given the non-survival of important texts. Suetonius, for

⁹¹ For discussion, see Langlands (2006) 124–5.

⁹² Consider Pliny's own separate lists of Greek and Roman authorities for each book, or the organisation of Roman libraries by language. On biculturalism as an ideal of the educated man see e.g., Pliny, *Letters* 3.1, 7.9, 7.25.

⁹³ Compare the claims to the utility of his compilation made by Diodorus, *Library* 1.3.6–8 with Skidmore (1996). Valerius' work, like Pliny's, is dedicated to a Caesar. It, too, claims one grand predecessor in the allusion in this paragraph to Livy (*Urbis Romae... historiae seriem felici superiorum stilo conditam*), and, like Solinus, selects mainly from a relatively small number of sources, in this case Cicero, Livy, Varro and Pompeius Trogus.

⁹⁴ 'Nor have I had any desire to include everything' (*nec mihi cuncta complectendi cupido incessit*, 1 preface).

⁹⁵ The emphasis of Bloomer (1992). While the *exempla* might well have provided useful material for the formal teaching of rhetoric in the schools, it is also possible to envisage their contributing to the broader socialisation of young Roman males; cf. Beard (1993); Langlands (2006).

example, composed a multi-volume work called the *Meadow* (*Pratum*), modelled on the Hellenistic Greek miscellany of Pamphilus, but evidently focused, like Varro's *Antiquities*, exclusively on Roman culture. It was used by later compilers including Gellius, Solinus, various late antique authors and Isidore. Various reconstructions have been advanced, based on the few surviving fragments and a description in the ninth-century Byzantine compilation, the *Souda*. Perhaps it included information on festivals, games, dress, calendars, the lives of famous writers – but some of these may be separate works. It is unclear what claims, if any, it made to be comprehensive or authoritative, or how much, if anything, it included on the natural world. It seems quite plausible that works like this one might have shared a great deal in method with more obviously encyclopaedic works, even if it is likely to have been at the limits of what we may want to term encyclopaedic. But it is hard in this case to be sure.

In other cases, however, we have more to go on. The best extant example of miscellanistic encyclopaedism in classical Latin is Gellius' *Attic Nights*, composed in the second century CE. In this text we can see much more clearly how ancient commentators tended to imagine a continuum rather than a sharp frontier between miscellanistic and encyclopaedic procedures. From the very beginning of the text, ideals of comprehensive coverage are not so far absent as they might initially appear. In his preface, for example, Gellius describes his own collection of excerpts from reading. The method of excerpting by a continual process of note-taking sounds very similar to that described for Pliny the Elder, and Gellius' use of a Plinian table of contents gives a similar impression of the scope and ambition of his own text. He differs, however, in refusing to offer up any overt rationale of organisation: 'I have ordered my material in haphazard fashion, the same order I used in the original process of note-taking . . . the things which pleased me I used to jot down indiscriminately and without distinction' (preface 2). In that respect he seems at first sight to be aligning himself with the tradition of the Greek miscellanies listed in Pliny's preface; in fact he even lists, like Pliny, some of the titles chosen for such collections in the past (preface 6–9). On closer inspection, however, his self-representation in this passage turns out to be a little more complicated. For one thing he ends up dissociating himself from these other miscellanistic works, stressing the contrast between their ostentatious but undiscerning accumulation and his own discriminating choice of what to copy and what not: 'taking only those things which might . . . lead active minds to a desire for honourable learning and to the contemplation of the useful arts by a swift and easy short-cut' (preface 12). It is striking that the language of usefulness intrudes here: even miscellanistic

writing, it seems, at least in the hands of Gellius, has some links with the rhetoric of practical application we have seen already for Celsus and others. It is also surprising (and amusing) to find alongside Greek titles such as the *Meadow* and *Amaltheia's Horn*, the titles *Natural History* and *Moral Epistles*, clear allusions to the work of Pliny and Seneca. Is Gellius suggesting that the serious and scientific presentation of some Roman works is just a cover for miscellany? Or even that his own miscellany has a more serious point?⁹⁶ The preface as a whole thus resists any sharp separation between 'miscellanism' and encyclopaedism.

The atmosphere of indiscriminacy continues into the body of the text itself, but here too it would be misleading to take Gellius' claims about random composition too much at face value. Each of Gellius' twenty books gathers a mass of short essays on themes ranging from obscure points of lexical usage and miniatures of literary criticism to historical anecdotes and the origins of odd cultural features. Both Greek and Roman material is included, but in contrast with Valerius Maximus, Gellius takes great care not to order his nuggets of information in any easily discernible scheme, and allows his recurring themes to emerge only implicitly and gradually. Nevertheless the work's varied chapters do between them communicate a distinctive stance on the Roman past, on language use and on literary style – he cites Greek and Latin books repeatedly; and also on the question of what kinds of learning and education should most be valued (often exemplified in personal reminiscences, featuring, among many others, his teacher, Favorinus of Arles). On the face of it his text could not be more different from the methodical maps of education offered by Celsus' *Arts* or (presumably) Varro's *Disciplines*. Yet it too offers one idealised model of a Roman *pepaideumenos*. Reading the *Attic Nights* is a genuinely educational experience, one that imparts not only actual knowledge but also a particular ethic of what it is to be educated. This is a different kind of bid for cultural authority from that of Pliny the Elder: it does not claim to be comprehensive in its collection of material, nor does it represent the gathering of knowledge in itself as an accomplishment; instead it represents the educated life as a mode of being, and learning as a process which enables the educated man to construct for himself a coherent vision of what is to be valued in the Roman past and the Roman present.⁹⁷

⁹⁶ For discussion of Gellius' aims and the relation of his work to possible models, see Holford-Strevens (2003) 27–36.

⁹⁷ We have learned a great deal here from Joe Howley's as yet unpublished PhD thesis on Gellius: Howley (2011).

We also have a number of surviving Greek miscellanies from roughly the same period. Some of these texts share Gellius' didactic concerns. As for Gellius, claims to comprehensiveness of coverage tend not to be made explicitly; instead these texts represent boundless curiosity and breadth of knowledge as markers of the truly educated man. Particularly important in that respect are the sympotic miscellanies of the Hellenistic and Roman world. These texts were ultimately descended from the philosophically themed symposium dialogues of Plato and Xenophon in the fourth century BCE.⁹⁸ In its later manifestations the format offered a means of gathering together a group of educated interlocutors to engage in competitive displays of erudition on a very wide range of topics, modelling the all-round education idealised in the Hellenistic and Roman periods and the ways it ought to be actively deployed. Sympotic works also offered the readers a kind of virtual participation in the bookworld, especially through the image of entering into dialogue with the authors of the past who are so often quoted within the erudite arena of sympotic conversation.⁹⁹ We know of large numbers of non-surviving sympotic miscellanies from the Hellenistic period, including among others the medical *Symposium* of Heraclides of Tarentum (first century BCE), the *Symposium* of Aelius Herodian (second century CE), the *Conversations* of Heraclides Ponticus the younger (first century CE), the *Sympotic Miscellany* of Aristoxenus of Tarentum (fourth century BCE) and the *Sympotic Miscellany* of Didymus Chalcenterus (first century BCE).¹⁰⁰ In the imperial period, the longest of these texts was Athenaeus' vast *Deipnosophists* (*Banqueting Sophists*), which does survive in large part. It is a treasure trove of information and quotation from earlier works on sympotic subjects:¹⁰¹ well over a thousand works are cited, more than ten thousand lines of poetry, and on some subjects – ancient dining and fragmentary comedy for example – the work is a major source of knowledge. Moreover the text flaunts its research as much as does Pliny's *Natural History* or the surviving universal histories. The method of compilation and ordering resembles that of other compilatory works from the same period.¹⁰²

But the most important case for our purposes is Plutarch's *Sympotic Questions*, simply because it exemplifies so well the ideal of the miscellany as a

⁹⁸ König (2008) and (2012). ⁹⁹ König (2008) 87–90; König (2012), esp. 41–52.

¹⁰⁰ See Martin (1931) for longer discussion of all of these figures; also Zecchini (1989) 23.

¹⁰¹ Papers on many aspects of these texts are collected in Braund and Wilkins (2000).

¹⁰² For one illustration see Wilkins (2007); and on Athenaeus' methods of compilation and the way in which the obsessive erudition of the *deipnosophists* dramatises, in comically exaggerated form, skills of research and argumentation which were central to the intellectual life of the Roman Empire, see Jacob (2001), esp. lxxi–lxxxiii, (2004a), (2004b), (2005a), (2005b).

vehicle for general education.¹⁰³ The text claims to record ninety-five different sympotic discussions, from different periods of Plutarch's life, on sympotic, scientific, literary, musical, mythological, philosophical and antiquarian topics. As readers, we are invited to imagine ourselves participating in the guests' puzzle-solving, their exchange of historical and literary tidbits, and their general valorisation of education as a commodity that transcends divisions of ethnic identity or philosophical allegiance. And by exposing us over and over again to repeated patterns of argumentation, Plutarch invites us to see a kind of unity underlying the miscellaneous variety of his work, and so hints at the way in which philosophical education can make coherent sense of the diversity of the world and of human experience.¹⁰⁴ Particularly important for Plutarch is the ideal of active reading, envisaged as something which could bring a kind of unity and comprehensiveness to material which to modern eyes looks at first sight highly disparate and incoherent. Plutarch imagines readers trained according to philosophical models of active reading, which encouraged one to draw moral lessons for oneself from disparate material. Moreover, one function of miscellanistic texts seems to have been to provide material which could be re-used in conversational or rhetorical contexts, lodged in the memory of the speaker and then redeployed ingeniously in order to display one's command over traditional learning.¹⁰⁵ This of course is a different model of comprehensive knowledge from that embodied in more conventionally encyclopaedic works, but perhaps an equally authoritative one. It is also a model which had a major influence over the *Attic Nights* of Aulus Gellius, who several times imitates Plutarch closely or mentions him as a model.¹⁰⁶ In fact Gellius was clearly indebted to Plutarch above all for many of the features of miscellanistic writing already discussed above, especially the idea that the attentive reader could learn from the text how to learn and display learning, and could use the varied material of the text as the starting point for a coherent and comprehensive vision of how to interact with the world and with the literary heritage of the Greek and Roman past. Those ideals are discussed further in many of the chapters below: for example by Katerina Oikonomopoulou in her chapter on Plutarch's *quaestiones*-writing more broadly; by Teresa Morgan, on collections of wisdom sayings; and by Daniel Harris-McCoy on Artemidorus'

¹⁰³ See König (2007) and (2012) 60–89; Klotz and Oikonomopoulou (2011); also Oikonomopoulou (chapter 6).

¹⁰⁴ See esp. König (2007) for a more detailed version of this argument.

¹⁰⁵ Cf. Goldhill (2009) on the anecdote in the learned culture of the Roman Empire.

¹⁰⁶ See esp. Gellius, *Attic Nights* 3.5, 3.6, 4.11 and 17.11 for essays which take their material from the *Sympotic Questions* and discussion by Holford-Strevens (2003) 283–5.

Oneirocritica, a manual of dream interpretation dating from the second century CE, showing how that text holds out the promise of a coherent system for dream interpretation for the reader who engages with the text and supplements it with personal experience, despite what seems, at first sight, its rather rambling structure and narrow subject matter. Similar ideals of active reading continued to hold an important place within medieval compilation, embodied within the concept of the *lectoris arbitrium* ('judgement of the reader'), which leaves the reader with final responsibility for imposing order on the material he encounters,¹⁰⁷ and in the work of the Renaissance humanists who so eagerly imitated the miscellaneous procedures of authors like Plutarch, Athenaeus, Gellius and Macrobius.¹⁰⁸

We have argued, then, that the boundaries between miscellanism and encyclopaedism are not at all clear-cut. All of these compilatory works in different ways exploit and promulgate the ideal of a broad education. All of them must have relied on great collections of earlier works. The methods employed – for example the technologies of note-taking – must have been similar. Admittedly, miscellanistic writing deliberately makes little of the effort expended, whereas the authors of the texts further along our spectrum tend to stress the labour of gathering and selecting, of hunting down rare books, of seeking the most reliable sources and of reconciling variant versions. Universal historians and authors like Pliny and Celsus from the middle of our spectrum also tended to emphasise the difficulties in arranging their material. Miscellanists again made less of this difficulty. However, works like that of Athenaeus in Greek and Gellius in Latin turn out on closer reflection to have been very carefully structured, and the impression of effortlessness is not so much a reflection of their methods of composition, but rather a mirage, based on their desire to maintain a fiction of fluid, oral, memory-based communication appropriate to the literary context of learned dialogue.¹⁰⁹ We may well feel that they are less 'encyclopaedic' than some of the other texts we have looked at, in the sense that their commitment to comprehensiveness and bibliographical labour is less explicit and less intense. But it should nevertheless be clear that they are closely related, and that the dividing lines between these different areas of the encyclopaedic spectrum are far from clear-cut.

¹⁰⁷ Cf. Johnson (chapter 15).

¹⁰⁸ E.g. see Jeanneret (1991) on the Renaissance inheritance of classical table-talk traditions; also Monfasani (1999) and Grafton (2004).

¹⁰⁹ Johnson (2010) 98–109. Athenaeus' *deipnosophists* are admittedly described as arriving at the banquet carrying bundles of scrolls (1, 4b), and the host, Larensis, is praised for the almost unprecedented size of his library (*Deipnosophists* 1, 3a), but it is striking that these books are not mentioned as physical objects once the conversation starts; instead the speakers quote from memory.

Late antiquity

Encyclopaedic ventures of various kinds thus seem characteristic of the literary world of the early Roman empire. Of course it is important not to exaggerate their importance in their own day. The largest works probably never existed in vast numbers of copies and perhaps had few readers. This is a major contrast with the role played by the first Enlightenment encyclopaedias, which, despite their vast size, were produced in thousands of copies and widely distributed, thanks to the technology of printing. Apart from the very few literary works with a place in educational curricula, shorter books were always consumed and copied more readily than long ones. Poetry was probably more popular than prose, especially in Latin. Besides, encyclopaedism was only one possible response to the growth of the book-world: others included the production of epitomes and florilegia, and the definition of a canon. Yet the creation of encyclopaedic texts retained its attraction, at least for some.

What do we see when we trace these patterns of comprehensive compilation into late antiquity? The dominant impression is one of continuity. To take just one example, Macrobius' early fifth-century *Saturnalia* was the last great exemplar of the sympotic form in Latin.¹¹⁰ Seven books of the work survive. It was consciously modelled on (among other works) Cicero's *Republic* and Plutarch's *Sympotic Questions*. It drew material from Greek and Latin sources, including (among very many others) Pliny's *Natural History*, the work of Varro and (probably) Athenaeus. The discussion covers in turn the calendar, religion and especially the festival of Saturn; jokes, wine and other sympotic themes; Virgil on religious and philosophical matters, followed by discussion of fish and fruits; more Virgilian criticism; the sources of Virgil's work; the originality of Virgil's treatment of his sources; philosophy and natural sciences. The opening lines claim a position in a long line of encyclopaedic works. They begin with a dedication to the author's son, perhaps evoking Cato's *To his Son* (*Ad filium*), declaring how many and various are the things presented to us in this life by nature (evoking Pliny's *Natural History* and the role assigned to nature in organising that work). Macrobius then declares that his son's education (*institutio*) is his concern, and that this book will offer a short cut, putting at his son's disposal all he has read and whatever is useful in Greek or Latin books, so that he can easily find any fact he seeks.

Nor have I heaped up things worth remembering at random. Instead, information on all sorts of matters culled from different authors and different periods has been

¹¹⁰ On which see König (2012) 201–28.

brought together into a single body, so that the notes I took down without any plan or order, purely to help me remember them, have been brought together as parts of a coherent whole. (Macrobius, *Saturnalia* preface 3)

That sentence echoes closely the passage quoted above from *Attic Nights* preface 2, where Gellius discusses in similar terms the random organisation of his work, although with a new stress on coherence which gives it a distinctively Macrobian twist. Macrobius thus invites the reader to see him engaged in a work which, like Gellius' text, has at least some links with the endeavours of Varro or Celsus or Pliny (even though it does not at any stage match their aspiration to total coverage, standing as it does very much at the miscellanistic end of our spectrum): it makes similar claims to utility, draws similar links with the ideal of civilised education, and relies on similar techniques of extraction, via note-taking, and recombination.

There are many other similar examples from the late antique world. The *Etymologies* of Isidore of Seville, composed in the early seventh century CE offers the key example from the Latin west.¹¹¹ Before him Cassiodorus' *Variae* and *Institutiones*, composed in early sixth-century Ostrogothic Italy, compiled and reordered elements of classical education for use in a Christian context. And behind these ventures lies the work of the grammarians.¹¹² Latin predecessors of Cassiodorus who might be considered in one or another sense encyclopaedic writers include Boethius and Martianus Capella, whose work *On the Marriage of Philology and Mercury* (*De Nuptiis*), covered the Seven Liberal Arts – grammar, dialectic, rhetoric, geometry, arithmetic, astronomy and music – entirely on the basis of Latin sources available to him in Vandal-ruled Carthage. Nearly contemporary with Cassiodorus' work were the encyclopaedic activities of Justinian's court in sixth-century Constantinople. The *Digest of Roman Law* was assembled in the 530s¹¹³ and perhaps inspired barbarian law codes in the west. The sources for this imperially directed project were entirely in Latin. In Greek, around the same time, and also in Constantinople, the grammarian Stephanos was compiling his fifty-book *Ethnika*, a dictionary of places mentioned in earlier Greek historical and geographical works, dedicated to Justinian, which remains a key source for lost works of this kind. Both works seem to reflect the intellectual energy of Justinian's capital, its literary creations paralleling the monumental public buildings documented by Procopius in his *De Aedificiis*, its educational institutions including the Pandidakterion, with its libraries claiming a new prominence

¹¹¹ See Keen and Merrills (chapters 13 and 14); also Henderson (2007a) and (2007b).

¹¹² Kaster (1988). ¹¹³ Harries (chapter 8).

after the closure of the schools of Athens. There are obvious parallels to be drawn with Ptolemaic Alexandria and Augustan Rome. None of this activity seems different in nature from what had gone before. From before Justinian, we have Stobaeus' fifth-century CE anthology of Greek literature, which was organised in four books covering, respectively, physics and metaphysics, logic and epistemology, ethics, and politics. Other key texts from the Greek compilatory tradition do not survive, and are traceable only through notices in later Byzantine encyclopaedias, especially the ninth-century *Souda*, and from the notes made by the late ninth-century patriarch Photius on the contents of great numbers of books, in his *Bibliotheca*.¹¹⁴

The Greco-Roman compilatory tradition – and the encyclopaedic modes it so often relied upon – could continue to flourish partly because it was not in conflict with Christian culture. Macrobius does not mention Christianity in the *Saturnalia*, which was for a long time taken – because of the central role played in the dialogue by some of the last pagan senators of Rome, and because of its dramatic setting in the period of their conflicts with Christian emperors (i.e. the late fourth century) – as a swansong for pagan classical culture against the encroachment of Christianity. It has become clear, however, that that interpretation is misguided, not least because the work was written a generation later than the events it describes, in the early fifth century.¹¹⁵ Moreover, the tone is hardly elegiac. In fact traditional pagan education continued to be important for the Christian elite of the fourth and fifth centuries. It is hardly surprising, then, that most of the material encompassed by pre-Constantinian encyclopaedic projects posed little problem for Christians. Also important was the fact that classical scientific writing had traditionally tended to avoid divine explanations – in order to distinguish itself from mythological discourse – and in that sense was relatively unthreatening to Christian thinking.

Augustine's work illustrates those points well. He describes how during his time at the imperial court in Milan, he had considered writing an account of the disciplines but had abandoned the project after completing one book on grammar (*grammatica*) and six on music. The remaining parts of the projected work included dialectic, rhetoric, geometry, arithmetic and philosophy.¹¹⁶ Like Martianus Capella's *De Nuptiis*, composed around a century later, Augustine's work was clearly pedagogical in scope. The debate over its relationship with Varro's lost *Disciplinae* has been mentioned already: clearly there was some common ground between the two works.

¹¹⁴ On all this see Reynolds and Wilson (1974) 37–68.

¹¹⁵ For the dating, but not this formulation, see Cameron (1966).

¹¹⁶ Augustine, *Retractationes* 1.6.

Augustine put the task aside, but his familiarity with the subject matter recurs in many other works, as we might expect, given his career teaching in Carthage and Rome.¹¹⁷

The encyclopaedic method even opened up new possibilities for Christian scholars. The full development of this trend is perhaps best exemplified in the work of Byzantine epitomators and florilegists,¹¹⁸ but Christian scholars caught on to the possibilities very early. Eusebius' *History of the Church* offered a new kind of compilatory universal history, one in which excerpts from Christian martyr acts and pagan texts such as Pliny's *Letters* were arranged in a new narrative, one that mapped a story just as coherent as that told by Diodorus Siculus. As the most recent research has shown, Eusebius' efforts and those like them were made possible only by that old staple of encyclopaedists, a well-stocked library.¹¹⁹

It is only when we look to the later centuries of late antique and Byzantine culture that the encyclopaedic tradition starts to look more vulnerable. We have suggested that late antique encyclopaedism seems in most respects to be a continuation of practices that can be detected as early as the third century BCE in Greek and the last century BCE in Latin. If there is an increasing suspicion that some later versions are citing originals not at first hand, but via the mediation of earlier compilations, this can be suspected of the earlier period too. But it was still possible, in principle, for an Isidore or a Stephanus to consult a vast mass of texts that have now vanished (although it is not always clear when a cited work was consulted at first hand rather than via some earlier compilation). In that sense, they operated in the same sorts of conditions as had their predecessors. However, that was no longer true of their successors in the Carolingian courts and perhaps less and less in Byzantium. Papyrus scrolls had a long shelf-life, but apart from those preserved in arid environments, none survives today. The process of transmission involved constant recopying, and it was the temporary near-cessation of recopying in the early Middle Ages, combined with changing valuations of ancient literature, that led to the loss of most books ever written in classical antiquity. Libraries lost to fire and Christian prejudice were probably less significant than the collapse of the classical educational system in the west, when Rome's successor states gradually abandoned Roman styles of government and taxation,¹²⁰ and the shrinking everywhere of the urban centres whose elite classes had maintained the prestige of literature.

¹¹⁷ See Pollmann and Vessey (2005).

¹¹⁸ See Magdalino, Németh and Gielen (chapters 10, 11 and 12); also Cameron (1994).

¹¹⁹ Grafton and Williams (2006). ¹²⁰ Reynolds and Wilson (1974); Wickham (1984).

Paradoxically, however, that shrinking of the bookworld may have led to an increased prestige for classical encyclopaedic writing, even as it restricted the possibility of fresh encyclopaedic endeavours. In the Roman imperial period and even in late antiquity, no single encyclopaedic work ever became canonised, presumably because there was felt to be no need in an age of public and private libraries, where the wealthy found it easy to borrow texts and purchase slave copyists. A number of encyclopaedic projects from those centuries have been understood as conscious attempts to preserve and transmit the core of classical learning. Yet such interpretations are both romantic and teleological. Pliny and his Greek analogues did not fear the collapse of civilisation: indeed the overwhelming flavour of imperial literature in Latin and in Greek is optimistic, or at least envisages posterity very much as a continuation of the present. The situation would change only when the fear of losing knowledge replaced the fear of being swamped by it. The decay of libraries and the loss of books made encyclopaedism both more difficult to produce, and also more vital. The afterlife of some classical projects – among them Aristotle's surviving didactic works and Pliny's *Natural History* – depended on their utility for new purposes, purposes for which they had not been designed, in other words purposes of salvage and preservation. Solinus' compilation from Mela, Pliny and others was not especially influential in its age, compared to its popularity in the Middle Ages. More than one hundred and fifty manuscripts survive, but they all descend from a single sixth-century archetype. Encyclopaedic works, such as those of Pliny, Solinus, Mela and Isidore assumed their real prominence only when their sources were no longer easily accessible. Despite the repeated claims made in their original prefaces and apostrophes, their greatest source of authority was late and accidental, a product of the disappearance of the world of books that their authors had taken for granted. That is not to deny that the compilatory techniques and totalising rhetoric we have been examining in this chapter had particular force in the late republic and early imperial period; nor is it to deny that the texts we have been looking at had important common ground, so that an ancient reader might have recognised them as part of a spectrum of significantly related comprehensive writings which we may choose to call encyclopaedic. But if we assume that a text can be defined as encyclopaedic also by the manner in which it is used, it is clear that the encyclopaedism of these remarkable compendia was in part a post-antique phenomenon.

3 | Encyclopaedism in the Alexandrian library

MYRTO HATZIMICHALI

Introduction

One of the most important results deriving from the chapters collected in this volume is the rejection of any rigid, preconceived definition of an encyclopaedia.¹ Works that can be, and have been, characterised as encyclopaedic across different periods and cultures often share characteristics, such as method of composition, didactic purposes, underlying political ideology and more. But their equally well documented differences, for instance in their selection of themes and specialisations, their structure, or their employment of particular types of technical language, ensure that they resist strict categorisation into a formally defined genre.

Against this fluid and complex backdrop, the first part of this chapter will examine the main parameters of encyclopaedism as it developed and flourished in and around the library of Alexandria from the early period of the Ptolemaic dynasty onwards. At the heart of Alexandrian encyclopaedism is the idea of comprehensiveness: the effort to amass and organise all available knowledge, driven by an ambitious royal push for cultural supremacy. The political dimension is highly relevant here, and is exemplified most prominently in the proactive, even aggressive, acquisition policy of the royal library, in terms of both books and personnel.² At the same time, this Alexandrian 'brand' of encyclopaedism was the product of a complex dynamic developing out of, on the one hand, increased contacts between Greek intellectuals and different eastern cultures (e.g. Egyptian or Jewish) and, on the other hand, the imperative for preservation and monumentalisation of Greek cultural heritage. The central concern in what follows will be to understand how this brave new world of knowledge was negotiated

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¹ See introduction, above, pp. 1–5.

² See Galen, *On Hippocrates' Epidemics III*, XVIIA 606.6–8.1 K for the books; Diogenes Laertius 5.37 and 58; 7.177 and 185 for the personnel.

by the scholars who worked in the library of Alexandria and benefited from the resources available there.

The second and main part of this chapter examines certain techniques and practices that originated or were substantially promoted and advanced in the library of Alexandria, and are at the heart of many later encyclopaedic projects. The three case studies to be discussed are firstly, the bibliographic project that followed from the library's dynamic acquisition policy; secondly, the production of extensive commentary on Homer; and thirdly, the development of lexicography. These outputs of scholarship were to a great extent material results of the encyclopaedic politics associated with the library, and relied on royal patronage (Ptolemaic and later Roman). They demonstrate how the objective of monumentalising the Greek cultural past took shape in large-scale encyclopaedic projects conceived especially for the study of language and literature, and realised through the unique resources of the library. These projects do not follow the 'educational' model of encyclopaedism, in the sense of engaging with a particular set of subjects (or 'arts'),³ but try in a more abstract way to encompass human knowledge about, so to speak, everything.

The politics of Alexandrian encyclopaedism

The ambitious enterprise of amassing multiple strands of knowledge into an output with unitary ambitions is often said to have its roots in Aristotle's Lyceum and the diverse research that took place there, covering literature, history, political theory, biology, astronomy and more.⁴ The mantle was inherited by the Alexandrian library,⁵ an institution whose very conception embodies the attempt at all-inclusive coverage, organisation and control of all available knowledge. It is significant that this conception was part of a deliberate cultural policy on the part of the Ptolemies, who actively encouraged and financed the acquisition and scholarly perusal of 'all the books in the world',⁶ in a manner comparable with royal/imperial support

³ See introduction, above, p. 7.

⁴ On encyclopaedism in the Lyceum see Vegetti (1990).

⁵ The connection between the Lyceum and the Alexandrian library should be sought in the involvement of Peripatetics such as Demetrius of Phaleron and Strato of Lampsacus (Diogenes Laertius 5.58 and 78, *Letter of Aristeas* 9–11) in the founding of the library and the education of the early Ptolemies. The connection was anecdotally emphasised in antiquity, with Strabo stating that 'Aristotle taught library organisation to the kings of Egypt' (13.1.54).

⁶ The expression comes from the *Letter of Aristeas* 9.

for later encyclopaedic projects.⁷ Among the fragments of Alexandrian scholarship there is not enough evidence to permit an assessment of the level of direct royal involvement in the conception and execution of particular scholarly projects. It cannot be doubted, however, that the enabling and driving force behind the intellectual attainments discussed here was royal patronage, crystallised in the very establishment and lavish endowment of the library and aimed at asserting political as well as cultural power across the Hellenistic world.

The extent to which this cultural project was an aggressive affirmation of Greek identity has provoked some debate in recent years, with some scholars noting a deliberate exclusion and marginalisation of non-Greek, particularly Egyptian, elements, and others detecting aspirations to a truly universal, cross-cultural accumulation of knowledge.⁸ It should be noted that the complex attitude of the Ptolemies towards Egyptian culture included a sustained effort to present themselves as the rightful heirs to the pharaohs, which led to the adoption of certain Egyptian cultural practices, while others were marginalised or subordinated through a process of Hellenisation.⁹ In this context it is of interest to refer briefly to two non-Greek enterprises that reflect the encyclopaedic ambition of the Alexandrian library. The first such project is the historical work of the Egyptian priest Manetho from Heliopolis, who was active during the reigns of Ptolemy Soter and Ptolemy Philadelphus, in the first half of the third century BC. He had ‘embraced Greek culture’,¹⁰ and proceeded to bring together and organise ancient Egyptian history into a coherent and expansive whole, constructing a continuous narrative out of collected historical records that had consisted primarily of chronological tables and lists of kings’ names. The evidence for Manetho’s presence among Ptolemy Soter’s circle of advisers¹¹ suggests that his work may have been instigated or encouraged by royal patronage, which would place him within the context of the Ptolemaic pursuit of global knowledge.

The second non-Greek enterprise that is strongly linked to the library of Alexandria in our sources is the translation of the Jewish Torah into

⁷ See Harries, Németh and Zurndorfer in chapters 8, 11 and 24. For a survey of the Ptolemaic enterprise, see Jacob and de Polignac (1992), a work which is appropriately entitled:

Alexandrie, IIIe siècle av. J. C.: tous les savoirs du monde ou le rêve d’universalité des Ptolémées.

⁸ For the first view see Erskine (1995) 43 and Maehler (2004). For the second view, El-Abbadi (1990) 31–102, esp. 98–9 and (2004).

⁹ ‘Pro-Egyptian’ policies, aimed at legitimising Ptolemaic power in the eyes of native Egyptians, included the decoration of newly founded Alexandria with ancient artefacts from ‘old Egypt’, and the establishment of the new cult of Serapis, a Hellenised form of the Egyptian god Osiris-Apis. See Thompson (2008) 71, with further references.

¹⁰ Waddell (1940), fr. 42 (= *FGrHist* 609 Fr. 8).

¹¹ Waddell (1940), fr. 80 (= *FGrHist* 609 T 3).

koine Greek and the production of the Septuagint, a large-scale enterprise worthy of the encyclopaedic ambitions of the Ptolemies. The narrative contained in a Jewish document known as the *Letter of Aristeas* has many fictitious elements, but it is significant that, from a Jewish point of view, it ascribes the initiative for the translation to the king and the library's acquisition policy. Thus we can see that the encyclopaedic drive towards comprehensive knowledge emanating from the library of Alexandria had a broader international impact and constituted an assertion of Ptolemaic power through patronage of intellectual projects with cross-cultural credentials.

As we move towards the Greek side of things, we should pause to remind ourselves that the story of the Alexandrian library also offers a particularly pointed illustration of the contested nature of encyclopaedism and the tensions that can arise between different views of how the large-scale concentration of knowledge ought to be negotiated. I am referring to the career of Eratosthenes of Cyrene,¹² who was librarian at Alexandria in the second half of the third century BC. This impressive 'athlete of knowledge'¹³ engaged in literary studies as one of the early interpreters of Old Comedy, among other pursuits.¹⁴ With his poems, preserved only in fragments, he claims a place alongside Callimachus and Apollonius of Rhodes as a Hellenistic poet-scholar. At the same time, Eratosthenes was a scientist with strong interests in astronomy who wrote a highly influential geographical work and made a famous calculation of the earth's circumference.¹⁵ Finally, his output included some philosophical works, following training on the subject in the Athenian schools.¹⁶ And yet there is evidence for an ambivalent reception of this cross-disciplinary concentration of knowledge in one person, indicating that this kind of individualist encyclopaedic activity was controversial. Eratosthenes was assigned the nicknames *ὁ Βῆτα* ('the second-best', never attaining the highest level in any discipline) and *πένταθλος* ('the pentathlete'), indicating that he was considered a 'jack of all trades' but not a true expert in any field (*Souda* ε 2898). Similarly, Strabo accuses Eratosthenes of superficiality in his engagement with philosophy, and connects his failure to produce any substantial philosophical work with his parallel pursuit of other subjects.¹⁷

¹² The major survey of Eratosthenes and his output is Geus (2002).

¹³ The phrase is taken from Jacob (1992); see also Cusset and Frangoulis (2008) 7–9.

¹⁴ Geus (2002) 289–308. ¹⁵ Geus (2002) 206–8.

¹⁶ Geus (2002) 139–205; Strabo, *Geography* 1.2.2.

¹⁷ Strabo 1.2.2, where he suggests that philosophy may have been a mere pastime or 'a game' (*παίδιά*) for Eratosthenes.

With this note of caution concerning the reception of interdisciplinary encyclopaedic activity, we may now proceed to examine more specialist initiatives that bring together multiple strands of Greek cultural achievement and can thus provide a clearer picture of the nature of Alexandrian encyclopaedism. Some general characteristics have been hinted at, particularly by Christian Jacob, who has drawn attention to the nature of works that we characterise as encyclopaedic because they defy common divisions into different sciences, such as those of Eratosthenes and Strabo. Jacob has emphasised the accumulation of knowledge and memory as a central characteristic of Alexandrian culture, whereby new knowledge is created by arranging information in new contexts.¹⁸ The three case studies introduced in what follows pick up on Jacob's suggestions and provide additional perspectives on these processes of accumulation and re-contextualisation. At the same time, they illustrate how certain key practices that are relevant for most works that are thought of as encyclopaedic, and are discussed in this volume – such as collection, excerption and systematic citation from a wide range of written sources – can be traced back to activity in the Alexandrian library, and in particular to the intensive scholarly engagement with Greek language and literature.

These examples do not represent one particular moment in the history of the Alexandrian library because they did not all occur at once. In fact most of the activities that are highlighted in this chapter developed over long periods of time. Callimachus' *Pinakes* is datable to the author's lifetime in the early third century BC, but even it became a subject for comment and revision in later generations, as we shall see. It is notoriously difficult to date many of the remarks found in the surviving fragments from ancient commentaries, some of which are used below. There is, however, evidence for a preoccupation with 'factual' or 'scientific' aspects in Homeric commentaries from the time of Aristophanes of Byzantium (second century BC) at least until the time of Strabo. Finally, lexicography developed steadily from the early Hellenistic period, and reached a climax in the early imperial period with some large-scale compilations, after which it entered a phase of epitomes and exclusive/prescriptive lexica focusing on correct Attic usage. Therefore, in the investigation of Alexandrian encyclopaedism for the purposes of the present study, the relevant chronological span runs from the early days of Ptolemaic cultural expansion in the third century BC to the mid-first century AD.

¹⁸ Jacob (1998) 20; 24–7. See also Jacob (1996) and Naas (2002) 34–5.

Callimachus' *Pinakes*

Callimachus' *Pinakes* or 'Tables' is an early specimen of systematic Alexandrian classification and organisation of knowledge. Callimachus is best known as a poet, one of a series of Alexandrian poet-scholars,¹⁹ and was active in the first half of the third century BC. His *Pinakes* are often interpreted as an annotated inventory or catalogue of the contents of the Alexandrian library, particularly given Callimachus' close association with this institution and with the Ptolemies,²⁰ even though there is no firm evidence that he actually held the post of librarian. However, the impression emerging from the surviving material on the *Pinakes*, particularly from the title mentioned by the *Souda*, is not that of a library catalogue:²¹

Καλλίμαχος, υἱὸς Βάττου καὶ Μεσάτμας, Κυρηναῖος, γραμματικός. . . τῶν δὲ αὐτοῦ βιβλίων ἐστὶ καὶ ταῦτα . . . Πίνακες τῶν ἐν πάσῃ παιδείᾳ διαλαμπάντων, καὶ ὧν συνέγραψαν, ἐν βιβλίοις κ' καὶ ρ'.

Callimachus, son of Battus and Mesatma [Megatima], of Cyrene, grammarian. . . . His books include . . . *Tables of Men Distinguished in Every Branch of Learning, and their Works*, in 120 books. (*Souda*, κ 227, cf. frs. 429–452 Pfeiffer)

There are reasons for thinking that this title was not Callimachus' own but was assigned later,²² yet as a description of the content of the *Pinakes* it still suggests a wide-ranging effort to get to grips with the totality of written wisdom and its representatives, and to engage critically with the contents of the library rather than simply listing them. For example, Callimachus included biographical information on individual authors (frs. 429, 430). Furthermore, he assigned authors and works to both broad and narrower categories or genres: for example, Callimachus classified Prodicus as an orator rather than a philosopher (fr. 431), and Bacchylides' *Cassandra* as a paean rather than a dithyramb (*P.Oxy.* XXIII 2368.16). He also dealt with numerous cases of dubious or disputed authorship (e.g. frs. 437, 442, 444, 445). Blum placed particular emphasis on this effort to distinguish between genuine and spurious works and to assign the correct titles, but

¹⁹ ποιητὴς ἄμα καὶ περὶ γραμματικὴν ἐσπουδακώς, 'both a poet and an expert in grammatical science' (Strabo, *Geography* 17.3.22, on Callimachus).

²⁰ According to the *Souda* (κ 227) Callimachus 'was introduced to the king' (Ptolemy II); he also wrote the poem *Berenice's Lock* in honour of Berenice, the wife of Ptolemy III.

²¹ Blum (1991) 226–39 argues for two separate sets of *Pinakes*, not to be identified: according to Blum, one was a catalogue of the library's holdings, including duplicates etc., while the other listed authors and works without reference to the number of copies held.

²² See Blum (1991) 151–2.

he also acknowledged Callimachus' further contribution to what he calls 'biobibliography', or a 'national author lexicon', including all the authors and works that Callimachus had access to or information about.²³

Callimachus' *Pinakes*, therefore, was not simply a work of text-organisation. It demonstrates how the library and its riches could promote a stocktaking of the entirety of Greek literary culture in a single all-encompassing project. Here we find exemplified a series of practices that are legitimately associated with encyclopaedic projects and, as Jacob suggested, it is to the *Pinakes* more than the library itself that we should look for an image of Alexandrian encyclopaedism.²⁴ These practices include envisaging a universal subject matter (here the *πᾶσα παιδεία*, 'every branch of learning'), as well as its division into parts with their catalogues of examples and exceptions. As an illustration of how broad this *πᾶσα παιδεία* was for Callimachus, I refer to his account of authors on cake-making:

οἶδα δὲ καὶ Καλλίμαχον ἐν τῷ τῶν παντοδαπῶν συγγραμμάτων Πίνακι ἀναγράψαντα πλακουντοποιικὰ συγγράμματα Αἰγυμίου καὶ Ἡγησίππου καὶ Μητροβίου, ἔτι δὲ Φαί<σ>του.

I know, too, that Callimachus in his *Table of Miscellaneous Works* recorded books on the making of cakes, by Aegimius and Hegesippus and Metrobius, and also by Phaestus. (Athenaeus, *Deipnosophistae* 14.643e = fr. 435 Pfeiffer)

Thus from the early days of Alexandrian scholarship a reference work enabling cross-reference and comparison had been available, providing a background and an ideal of the totality of knowledge, while at the same time inviting reassessment and revision: we know that in the late third–early second century BC Aristophanes of Byzantium (on whom more below) wrote a separate treatise *On Callimachus' Pinakes* (Πρὸς τοὺς Καλλιμάχου Πίνακας).²⁵

The homeric proto-encyclopaedia

The second manifestation of Alexandrian encyclopaedism that I will explore here grew out of another major preoccupation of Alexandrian scholars, namely the establishment and critical edition of the received classical texts, primarily that of Homer. This enterprise was accompanied by a variety of supporting works, from specialised monographs to running

²³ Blum (1991) 150–60; 233–46. ²⁴ Jacob (1996) 48; see also Fowler (1997) 20.

²⁵ Slater (1986) frs. 368–369. For more details on the impact of Callimachus' *Pinakes* see Blum (1991) 182–210.

commentaries.²⁶ There are only fragmentary remnants from all this exegetical activity, mostly transmitted in the form of excerpted notes, known as scholia, in the margins of a few medieval manuscripts preserving the Homeric text. The Homeric scholia add up to a sizeable corpus, but it is not always clear how much can be traced back to the original Alexandrian commentaries, because there has been large-scale fusion with later material.

The kind of encyclopaedic project that can be detected in the Alexandrian scholars' approach to Homer has its roots in a much older tradition that placed Homer at the heart of Greek education. The poet, in his role as preserver of memory and knowledge, thanks to his privileged relationship with the Muses, was treated as a sage and a source of facts relating to all aspects of human life.²⁷ Havelock described the Homeric epics as a 'tribal encyclopaedia' of social and moral behaviour patterns, and suggested that in archaic Greece there was only a 'thin boundary between moral behaviour and skilled behaviour'. It was therefore easy to make the transition from Homer, the custodian of religious and social traditions, to Homer, the expert on technical matters.²⁸ Thomas criticised Havelock for reading back into Homer features that are derived teleologically from his later prestige:²⁹ it is precisely this later prestige that is most significant for the purposes of the present study, as the Greeks from the classical times onwards duly turned to the *Iliad* and *Odyssey* for *exempla* of human and divine behaviour, for the ascertainment of historical facts from the distant past, even for things that fall under the categories of technical or factual knowledge.³⁰ Plato found this treatment of Homer as an authoritative proto-encyclopaedia extremely objectionable, and thus proceeded to discredit claims of universal knowledge of 'all the arts' made on Homer's behalf, first indirectly in the *Ion* and then more forcefully in the *Republic*.³¹

But Plato's republic did not materialise in the Alexandrian library. On the contrary, Homer's authority persisted or even grew, to the extent that scholars felt the need to comment on every point of detail. As a result, we can often observe traces of scholarly disagreements where one side

²⁶ Pfeiffer (1968) 171–233 and Fraser (1972) 447–79 remain the most comprehensive overviews of this activity. Important recent contributions to our knowledge of this aspect of Hellenistic scholarship include Montanari (1993) and (1998), and West (2001).

²⁷ Detienne (1996); Thomas (1992) 116. The claims about the poet's privileged access to truths (and untruths) through the Muses are as old as the poems of Homer and Hesiod; cf. *Iliad* 2.484–93; *Theogony* 22–35.

²⁸ Havelock (1963) 61–86, a chapter entitled 'The Homeric Encyclopedia', which detects the transmission of authoritative information on religious and cultic practices, domestic mores, political power relations, seamanship etc. within the first book of the *Iliad*.

²⁹ Thomas (1992) 116. ³⁰ See for example Xenophon, *Symposium* 4.6.

³¹ *Ion* 536e1–541b5; *Republic* 10.598d7–599e4; 606e1–607a8.

follows an agenda of justifying Homer's wording and proving him right. In the 'opposite camp', Eratosthenes believed that poetry was aimed at entertainment rather than instruction (Strabo, *Geography* 1.2.3) and advised against using Homer for literal information (1.2.17). Moreover, Aristarchus (librarian in the mid-second century BC) made allowances for Homer's poetic licence and urged an exclusive focus on the poet's words rather than fanciful interpretations (D Scholion on *Il.* 5.385). The scholarly debate over Homer's contested authority required a very extensive background of factual knowledge, which would enable the identification and selection of the relevant material. Some characteristic concerns about Homer's factual credentials are vividly exemplified in Strabo's *Geography*, a work written in the Augustan period, engaging with many issues of Homeric interpretation that were current in Hellenistic times and are paralleled in the scholia. For example, Strabo demonstrates that Homer's reference to the island of Pharos as being 'in the open sea' (*Od.* 4.354–7) is not due to ignorance, but the result of using accurate knowledge about the silting of the Nile for the purposes of Menelaus' tale (1.2.23, cf. Σ *Od.* 4.356). Elsewhere Strabo is again keen to show that there is a solid basis underlying Homer's geography, even when mythical elements are added as a pleasant embellishment (1.1.2–7 and *passim*, e.g. διαφαίνει τὸ πολυμαθὲς τὸ περὶ τὴν γεωγραφίαν Ὅμηρος, 'Homer demonstrates his broad knowledge about geography', 1.2.20). All these examples show that Strabo was intensely conscious of Homer's established authority, and at 8.3.23 he indicates that it is this weight of tradition that requires constant engagement with the Homeric past.³²

The most extreme case for the programmatic treatment of Homer as an encyclopaedia or reference work is a later treatise that was erroneously attributed to Plutarch, *On the Life and Poetry of Homer*. In this work the author sets out to look for signs of expertise and foreshadowings of scientific, philosophical, even linguistic and rhetorical observations, all of which are found in the Homeric text without fail, sometimes with the aid of ingenious connections and comparisons (see especially chs. 6, 27, 92, 106–11, 182, 200).³³

³² See Clarke (1999a) 248–51. For a discussion of Strabo's treatment of Homer see Schenkeveld (1976) 63–4, where he concludes that: 'by the dominant position of Homer's poetry in Greek life Strabo was conditioned to regard Homer as knowledgeable and trustworthy in matters of geography also'. Kim (2007) shows how Strabo's defence of Homer as the first geographer centres on the implicit claim that Homer embodies the ideals of 'utility' and 'wide learning', which are highlighted in Strabo's proem.

³³ The text and translation of this work can be found in Keaney and Lamberton (1996). They remark that 'for "Plutarch", the *Iliad* and the *Odyssey* constitute a vast encyclopaedia with a complex, sometimes obscure structure of meaning' (21, cf. 28).

Alexandrian scholars in the Hellenistic period were already branching out from their 'strict' remit as literary commentators, normally expected to cover points of language, style, textual criticism etc., towards the wide range of disciplines and subjects on which Homer was thought to be an expert.³⁴ Our surviving body of scholia and related evidence reveal the large variety of sources that were mobilised for this project, perhaps at different stages of the tradition. The overall picture suggests that, in their search for evidence vindicating Homer's encyclopaedic credentials, Alexandrian scholars engaged in a new encyclopaedic project of their own. Given Homer's central role in Greek education, this large-scale interpretative work, aimed at bringing out his multi-faceted expertise, may also be compared to the more educational encyclopaedic formats. As those encyclopaedic works instruct the reader on a number of disciplines, in the same way, through reading and understanding Homer, the pupil may gain authoritative knowledge across a range of subjects. I will discuss below some specific examples bearing upon further fields of Homer's presumed expertise, which will demonstrate the breadth of scope of the material that was brought to bear on Homeric exegesis.

Aristotle's *History of Animals* and related lost zoological works are particularly prominent within this body of exegetical material. It is an interesting statistical fact that this type of Aristotelian work is cited most frequently (24 references) in the scholia to the *Iliad* and not, for instance, the *Homeric Questions* or the *On Poets*.³⁵ The importance of zoological details for this all-encompassing Homeric exegesis is also evidenced in the activity of Aristophanes of Byzantium (fl. c. 255–180 BC), who was librarian at Alexandria and is best known as an editor of Homer. Aristophanes produced an epitome of Aristotle's *History of Animals*, perhaps also incorporating material from Theophrastus and from a Peripatetic collection of material circulating under the title Ζωϊκά (*Animal Matters*). Some of this work survives as part of a compilation prepared for the Byzantine emperor Constantine VII (tenth century AD).³⁶ It appears that Aristophanes' work was conceived as an aid for Alexandrian scholars, who were looking for information on individual animals. This was not easily obtainable from Aristotle because of the theoretically driven arrangement of his *History of Animals* that proceeded through systematic identification of *differentiae* (special distinguishing features, e.g. 'viviparous', 'four-legged' or 'winged'). Aristophanes' programmatic statement is preserved in the tenth-century collection:

³⁴ See also Jacob (1996) 48.

³⁵ This does not take into account material from Porphyry's *Homeric Questions*, which was excluded from Erbse's edition of the Iliadic scholia.

³⁶ Slater (1986) fr. 377 and CPFI 1* 36T. Cf. Németh in chapter 11.

Ἐν τῇδε τῇ συντάξει, τὸν ἀριθμὸν οὔση δευτέρα, πειράσομαι, προγράφων περὶ οὗ ἐστὶν ὁ λόγος ζώου ὄνομα, προσυποτάσσειν τούτῳ ὅσα τὸ προταχθὲν ζῶον μῦρια κέκτηται, εἶτα περὶ τῆς ὀχέας αὐτοῦ καὶ πόσους κύειν δύναται μῆνας, περὶ τε τῆς ἐκτέξεως ποῖα καὶ πόσα ὑπομένει τίκτειν βρέφη· ἐπὶ πᾶσι δὲ τίς ὁ βίος τοῦ προγραφέντος ζώου καὶ ποῖον τὸ ἦθος καὶ πόσα δύναται ζῆν ἔτη. τοῦτο δὲ ἐπειράσθην ποιῆσαι, ἵνα μὴ διηρημένην ἐν πολλοῖς τὴν ὑπὸ Ἀριστοτέλους περὶ ζώων πραγματείαν ἐπιπορεύῃ, συνηγμένην δὲ ὁμοῦ πᾶσαν τὴν ἐφ' ἐνὶ ἐκάστῳ ζώῳ ἱστορίαν ἔχῃς.

In this second section I will try to state first the name of the animal in question, then add its parts, then the information about its reproduction and how many months the pregnancy can last, and about the birth, what sort of and how many offspring it can give birth to; in all cases [I will describe] the habits and behaviour of the animal in question, and how many years it can live for. I attempted this task so that *you would not have to browse through Aristotle's discussion of animals, which is spread into many parts, but you would have the details of each individual animal gathered in one place.* (Aristophanes of Byzantium, *Historiae Animalium Epitome* 2.1)³⁷

This passage offers a very useful insight into the methods that are more generally relevant for encyclopaedic projects, because encyclopaedias are largely about summarising, selecting and ultimately rearranging and transforming the body of knowledge contained in the original sources in order to suit new purposes. There are several examples from the scholia to the *Iliad* where commentators turn to Aristotle for confirmation and proof of Homer's accuracy in observations about the animal kingdom. These references may be connected with Aristophanes' effort to make the Aristotelian material more accessible.³⁸

Il. 17. 663: καίόμεναί τε δεταί, τάς τε τρεῖ (sc. λέων) ἐσσύμενός περ

... and burning torches, from which the lion turns in fear even when he is charging furiously

Σ *Il.* (ex) 17. 663: καίόμεναί τε δεταί, τάς τε τρεῖ· καὶ Ἀριστοτέλης ἐν τῷ Περὶ ζώων φησὶ λέοντα μάλιστα τὰ πῦρ δεδοικέναι.

'and burning torches, from which he turns in fear'; Aristotle, too, in his *On Animals* [*HA* 9.629b21, citing this line of Homer] says that fire is the lion's chief fear.

At *Il.* 21.203 (τὸν μὲν ἄρ' ἐγγέλυσεν τε καὶ ἰχθύες ἀμφεπένοντο; 'eels and fish took care of him') a question arose for commentators as to whether eels were correctly separated from the rest of the fish. The explicit reference to

³⁷ My italics. Text from S. Lambros (ed.) *Excerptorum Constantini De natura animalium libri duo; Aristophanis Historiae Animalium Epitome, Supplementum Aristotelicum* I, Berlin 1885, p. 35.18–36.5 (2.1).

³⁸ Cf. *CPFI* 1*: 324–25.

Aristotle occurs in a second-century AD papyrus preserving a commentary that clearly belongs to the same tradition as our scholia.³⁹ Material from three different passages of the *History of Animals* (4.538a2–3; 6.570a3–26; 7.592a23–5) is brought together to prove in great detail that eels are in fact very different from fish and that the poet was right in making the distinction.

Other areas of expertise that Homer was credited with in the exegetical tradition, or that gave rise to technical/factual comments, include astronomy (cf. Σ *Il.* 19.413; Σ *Od.* 5.572; Strabo 1.1.6); anatomy and medicine (Σ *Il.* 4.492b; 1.53–5; 12.189; 13.438); agriculture (Σ *Il.* 13.564a; Σ *Il.* (ex) 18.550–60, where the didactic value is emphasised); and plant-lore, where Theophrastus is appealed to for confirmation of Homer's facts:

Il. 23. 328: ἡ δρυὸς ἢ πεύκης· τὸ μὲν οὐ καταπύθεται ὄμβρῳ

... whether of oak or pine, which does not rot in the rain

Σ *Il.* 23. 328: οὐ καταπύθεται ὄμβρῳ: Θεόφραστος φησὶν αὐτὸ κατορυσσόμενον ἢ ἐν λίμναις βρεχόμενον μὴ σήπεσθαι, ἐν δὲ θαλάσσῃ σήπεται.

'it does not rot in the rain': Theophrastus (*HP* 5.4.3) says that it does not rot when buried or soaked in lakes, but that it rots in sea-water.

These examples are indicative of the strategies employed in the systematic study of Homer. The exegetical drive, combined with a concern to document the accuracy of his pronouncements on all matters of nature and human life, led to an extraordinary breadth of scope in the commentary tradition that goes back to the Alexandrian library. This was in turn made possible through the use of numerous specialised sources available in the library, a strategy paralleled in many other compilatory works associated with a tradition of encyclopaedism.

Lexicography

The third case of encyclopaedic scholarly activity that flourished in connection with the library of Alexandria is lexicography. Lexicography is not of course unconnected with studying and commenting on literary texts, and the initial purpose of glossaries was indeed to aid with literary vocabulary that was becoming unfamiliar as the Greek language evolved. Our information on the early stages of Greek lexicography in the Hellenistic period

³⁹ *P.Oxy* 221 = Pap. XII Erbse, Col. IX 27-X 15 = *CPFI* I 1* 30T.

comes largely from Athenaeus, in his *Deipnosophistae* (early third century AD), who cites an array of such works in his quest for rare words, and from scattered references in later surviving lexica.⁴⁰ From this evidence it is possible to construct an evolutionary narrative for developments up to the point that will concern me most, namely the point where the distinction between lexicon/glossary and encyclopaedia becomes blurred and perhaps even irrelevant. I will present this narrative briefly, focusing on developments in the organisation and ordering of the material, an aspect that is particularly pertinent for the study of encyclopaedism.

The earliest known lexicographer was the poet Philitas of Cos (late fourth – early third century), who composed a work that became known as Ἀτακτοὶ Γλῶσσαι (*Rare Words in no Particular Arrangement*).⁴¹ His work was famous enough to become the target of New Comedy jokes and sarcastic epigrams,⁴² but more significant for my purposes here is the apparent lack of any recognisable arrangement principle in this early stage of the tradition. The first head of the Alexandrian library, Zenodotus of Ephesus (early third century BC) arranged his collection of Γλῶσσαι (*Rare Words*) in alphabetical order, while papyrological finds have revealed that a series of elementary word lists circulating from the third century BC onwards were also arranged alphabetically.⁴³ Thus when Callimachus arranged his own contribution to lexicography, the Ἐθνικαὶ Ὀνομασίαι (*Local Terms*), according to a thematic categorisation of words with semantic affinities, it was a pioneering effort introducing a new type of lexicographical work, which became known as ‘*onomasticon*’.⁴⁴ We owe to Athenaeus the information that there was a section on fish names presented as a catalogue, with details on words used by different local groups of speakers:

Καλλιμαχος δ' ἐν Ἐθνικαῖς Ὀνομασίαις γράφει οὕτως· ἐγκρασίχολος, ἐρίτιμος Χάλκηδόνιοι. τριχίδια, χαλκίς, ἴκταρ, ἀθερίνη. ἐν ἄλλῳ δὲ μέρει καταλέγων ἰχθύων ὀνομασίας φησὶν· ὄζαινα, ὀσμύλιον Θούριοι. ἰωπες, ἐρίτιμοι Ἀθηναῖοι.

⁴⁰ Surveys of Hellenistic (and later) lexicography can be found in Latte (1925); Alpers (1990); Tosi (1993); Degani (1995).

⁴¹ For Philitas' grammatical work see Dettori (2000) and Spanoudakis (2001) 347–403. On the title Ἀτακτοὶ Γλῶσσαι see Dettori (2000) 27 and Spanoudakis (2001) 384–6.

⁴² Straton fr. 1, 40–4 K-A; *Anth. Pal.* XI 218.

⁴³ Elementary papyrus glossaries are studied in Naoumides (1969). For Zenodotus' alphabetisation, the evidence comes from Σ *Od.* 3. 444: Ζηνόδοτος δὲ ἐν ταῖς ἀπὸ τοῦ δ γλῶσσαις τίθησι τὴν λέξιν, 'Zenodotus places this word among rare words beginning with delta'. Since the word referred to here is ἀμνίον we should suppose either a scribal error whereby Δ was substituted for Α at some stage of the transmission, or that Zenodotus accepted the reading δαμνίον attributed by the scholion to Nicander and Theodoridas.

⁴⁴ There is a surviving *Onomasticon* by Pollux from the second century AD.

Callimachus in *Local Terminology* writes as follows: anchovy (the Chalcedonians call it *eritimos*), pilchardlets, sardine, brisling, sand-smelt. In another section he lists terms for fish and says: *ozaina* (the inhabitants of Thurii call it *osmylion*); *iopes* (the Athenians call them *eritimoî*). (Athenaeus, *Deipnosophistae* 7.329a, transl. Olson (2006–2011) = fr. 406 Pfeiffer)

The *onomasticon* was a more sophisticated and more advanced step forward from the mechanical alphabetical ordering practised before Callimachus. This systematic arrangement of words into groups according to meaning is comparable to the philosophy behind Callimachus' *Pinakes*, where received literature was also divided into genres with groupings according to common characteristics.⁴⁵

After Callimachus this systematic arrangement was favoured more than the alphabetical one. The lexicographical work of Aristophanes of Byzantium, a rare instance of Hellenistic scholarship successful enough to have some sort of direct transmission,⁴⁶ seems to have been arranged thematically. This is suggested by the various surviving titles, which probably refer to sections of his large collection, the Λέξεις (*Words*): Περὶ τῶν ὑποπτευομένων μὴ εἶρησθαι τοῖς παλαιοῖς (*On words suspected of not being ancient*, frs. 1–36 Slater), Περὶ ὀνομασίας ἡλικιῶν (*On terms for age-groups* [for humans and animals], frs. 37–219), Περὶ συγγενικῶν ὀνομάτων (*On words for family relations*, frs. 220–336).

The motivation behind all these Hellenistic word collections came initially, as I mentioned above, from the need to facilitate the study of literary texts written in increasingly unfamiliar forms of Greek, especially in the case of Homer. At the same time, they provided a useful treasury for learned Hellenistic poets looking for rare sophisticated expressions – very often poet and lexicographer were the same person. On the other hand, there was a developing interest in local dialects (already seen in Callimachus' *Local Terms*), leading to a flourishing production of glossaries devoted to specific areas of the Greek-speaking world.⁴⁷ This geographical arrangement was yet another method of grouping and organising lexicographical material.

Through this variety in focus and method of arrangement, Hellenistic scholarship left a considerable legacy in the field of lexicography, from which the following generations of scholars using the library of Alexandria could

⁴⁵ Cf. Alpers (1975) 116. For a first-century AD critique of alphabetical arrangement as inferior to the thematic one, see Dioscorides, *Materia Medica* I 3.7–9.

⁴⁶ See Slater (1986) xii–xiv.

⁴⁷ For example, we know from Athenaeus that Hermonax wrote on Cretan *glossai* (*Deipn.* 3.76f), Moschus on Rhodian (11.485e), and Philemon (11.468f), Nicander of Thyateira (15.678f), Theodorus (15.677d) and Crates (3.114a) on Attic.

benefit. The key figure in the new era of compilation, reworking and prolific expansion is Didymus, active in the Augustan period, the scholar who is anecdotally reported to have written so many books (3,500) that he forgot what was in them! (Athenaeus 4.139c, cf. *Souda* δ 872.) Didymus was a milestone for the exegesis of classical authors, compiling and transmitting Hellenistic material, as well as conducting his own research. Two major lexicographical collections are also attributed to him, one on tragic and one on comic vocabulary.⁴⁸ But the extent of his overall production already points to a significant feature of post-Hellenistic scholarship and lexicography in particular, namely the size and scale of the works produced, resulting from processes of accumulation, excerption and compilation, processes which are central to any encyclopaedic project.

I will now turn in more detail to the most ‘encyclopaedic’ period of Greek lexicography as practised in Alexandria, namely the mid-first century AD, roughly contemporary with Pliny and Plutarch. Since size and scale is a principal point of interest, I should first draw attention to the fascinating reference made by Athenaeus to the 108th book of a work by Dorotheus of Ascalon (probably first century AD):

Δωρόθεος δ' ὁ Ἀσκαλωνίτης ἐν τῷ ὀγδῶ πρὸς τοῖς ἑκατὸν τῆς Λέξεων Συναγωγῆς θέτταν γράφει, ἥτοι ἡμαρτημένῳ περιτυχῶν τῷ δράματι ἢ διὰ τὸ ἄηθες τοῦ ὀνόματος αὐτὸς διορθώσας ἐξήνεγκεν.

Dorotheus of Ascalon, however, in the 108th book of his *Collection of Words* adopts the reading *thetta* [instead of *thraitta*, in a list of fish in a Middle Comedy text], either because he had before him a corrupt copy of the play, or because he himself proceeded to emend it due to the rarity of the word. (Athenaeus, *Deipnosophistae* 7.329d)

It is safe to suggest that a work of this length did not simply contain basic linguistic definitions aimed at making items of vocabulary intelligible to its readers.⁴⁹ There must have been additional preoccupation with the details of the things signified by the words. Porphyry suggests as much when he reports that Dorotheus devoted one entire book to a single word, the word κλίσιον (‘shed’, or ‘outhouse’), examining its meaning both in Homer and in Attic, and discussing miscellaneous historical information as well as issues

⁴⁸ This information is found in the preface to the surviving fifth-century lexicon of Hesychius, *Ad Eulogium* l. 4.

⁴⁹ An ‘encyclopaedic definition’ is one that ‘gives details much beyond what the language users should know of the concept in order to be able to use the sign in linguistic communication’: Béjoint (2000) 23; cf. Fowler 1997: 12–14.

of etymology and dialect.⁵⁰ If he was devoting a similarly lengthy treatment to each word, it is not surprising that his work extended well beyond a hundred books. This situation presents serious challenges for any attempt to draw a line between lexicon and encyclopaedia, because the project of analysing and examining the import of a language in its totality (including the *realia* behind the words) bears a striking resemblance to the quest for universal knowledge.

The final author I will look at is Pamphilus of Alexandria, who was active in the second half of the first century AD.⁵¹ His lexicon was 95 books long, and was probably arranged alphabetically, if we take at face value the information of the *Souda*:⁵²

Πάμφιλος, Ἀλεξανδρεὺς, γραμματικὸς Ἀριστάρχειος. ἔγραψε Λειμῶνα· ἔστι δὲ ποικίλων περιοχῇ, Περὶ γλωσσῶν ἥτοι λέξεων βιβλία ἑ· ἔστι δὲ ἀπὸ τοῦ ε στοιχείου ἕως τοῦ ω· τὰ γὰρ ἀπὸ τοῦ α μέχρι τοῦ δ Ζωπυρίων ἐπεποιήκει. εἰς τὰ Νικάνδρου ἀνεξήγητα καὶ τὰ καλούμενα Ὀπικά, Τέχνην κριτικὴν, καὶ ἄλλα πλεῖστα γραμματικά.

Pamphilus, of Alexandria. A grammarian of the school of Aristarchus. He wrote a *Meadow*, which is a summary of miscellaneous contents; *On rare words* i.e. *vocabulary* in 95 books (it contains entries from epsilon to omega, because Zopyrion had done the letters from alpha to delta); *On unexplained matters in Nicander* and the so-called *Opica*; *Art of Criticism*, and a large number of other grammatical works. (*Souda* π 142)

We have rather more information about what was in these 95 books than we do in Dorotheus' case: a quick survey of the fields of knowledge touched upon in Pamphilus' lexicon, as well as the methods and sources used for its composition, will serve to draw together the various strands of Alexandrian scholarly activity that can be characterised as encyclopaedic. First of all there is a wide range of subjects, covered in more depth than a simple lexical definition would afford, in what must have been originally entries of considerable length. In the surviving parts of Pamphilus' definitions there is, for example, evidence of antiquarian interest in details of cultural history

⁵⁰ *Quaestiones Homericae* on *Il.* 24.208, p. 132 Schrader: ὅλου βιβλίου ἐδέησε Δωροθέω τῷ Ἀσκαλωνίτῃ εἰς ἐξήγησιν τοῦ παρ' Ὀμήρῳ κλισίου, 'Dorotheus of Ascalon needed an entire book for the interpretation of *klision* in Homer'.

⁵¹ Hatzimichali (2005) contains a complete survey and analysis of the available information on Pamphilus and his work.

⁵² There has been some disagreement among scholars concerning the arrangement of Pamphilus' work because by this time both alphabetical and thematic structures were equally viable alternatives, with precedents in the Hellenistic tradition, as we have seen. Cf. Degani (1995) 515.

and local legend, such as the Eleusinian mysteries and a cultic practice in Sparta:

πλημοχόη· σκεῦος κεραμεοῦν βεμβικῶδες ἑδραῖον ἡσυχῇ, ὃ κοτυλίσκον ἔνιοι προσαγορεύουσιν, ὥς φησι Πάμφιλος. χρῶνται δὲ αὐτῷ ἐν Ἐλευσίνι τῇ τελευταίᾳ τῶν μυστηρίων ἡμέρᾳ, ἣν καὶ ἀπ' αὐτοῦ προσαγορεύουσι Πλημοχόας· ἐν ᾗ δύο πλημοχόας πληρώσαντες τὴν μὲν πρὸς ἀνατολὰς, τὴν δὲ πρὸς δύσιν ἀνιστάμενοι ἀνατρέπουσιν, ἐπιλέγοντες ῥῆσιν μυστικὴν.

‘plemochoe’: a clay vessel, shaped like a top, but steady on its base, which some call ‘kotyliskos’ as Pamphilus says. It is used at Eleusis on the last day of the Mysteries, which is named ‘Plemochoai’ for this reason; on that day, having filled two plemochoai they rise and overturn them, one towards the east, one towards the west, reciting a mystic chant.⁵³ (Athenaeus, *Deipnosophistae* 11.496a)

πυλεών· οὕτως καλεῖται ὁ στέφανος ὃν τῇ Ἥρᾳ περιτιθέασιν Λάκωνες, ὥς φησι Πάμφιλος.

‘pyleon’: this is the name for the wreath that the people of Laconia adorn (images of) Hera with, as Pamphilus says.⁵⁴ (Athenaeus, *Deipnosophistae* 15.678a)

Pamphilus’ lexicon also contained information on animals, with reference to biological characteristics and matters of natural history and curiosity, probably drawn from Aristotle or from a related Peripatetic source, following the practice of the Homeric commentators discussed above:

μέλανδρος δὲ τῶν μεγίστων θύννων εἶδος ἐστίν, ὥς Πάμφιλος ἐν τοῖς Περὶ ὀνομάτων παρίστησι, καὶ ἐστι τὰ τεμάχη αὐτοῦ λιπαρώτερα.

The ‘melandry’⁵⁵ is one of the largest kinds of tuna fish, as Pamphilus reports in his *On Words*, and its cuts are comparatively oily (Athenaeus, *Deipnosophistae* 3.121b)

αἱ δὲ πῖναί ὀρθαί φύονται ἐκ τοῦ βυθοῦ ἔχουσί τε ἐν αὐταῖς τὸν πινοφύλακα, αἱ μὲν καρίδιον, αἱ δὲ καρκίνιον· οὗ στερόμεναι θᾶττον διαφθείρονται. τοῦτο δὲ Πάμφιλος ὁ Ἀλεξανδρεὺς ἐν τοῖς Περὶ ὀνομάτων συμπεφυκέναι φησὶν αὐταῖς.

‘Pinnae grow upright from the seabed and they have inside them the pinna-guard, some have a small prawn, others a small crab; if they are left without this they die

⁵³ The *plemochoe* is a vase type that has been identified by archaeologists as a bowl with a convex profile and a turned-in rim, resting on a central foot, which was later replaced by a narrow stem. Pamphilus’ information raises the possibility that the ancients understood a different vessel by that name.

⁵⁴ Cf. Alcman fr. 60 and 3.65 in Page.

⁵⁵ The word must be a metaphor from μέλανδρον (τό), the (dark) heart of the oak-wood, cf. Theophrastus *HP* 1.6.2 and Pliny *NH* 9.48: [*thyynnoi*] *cetera parte plenī pulpamentis sale adservantur: melandrya vocantur, quercus assulis similia* (‘all the rest [of the tunny], with the flesh entire, is preserved in salt: these pieces are called melandrya, as resembling splinters of oak-wood’).

more quickly' (Aristotle, *HA* 5.547b16–18). This, as Pamphilus of Alexandria says in his *On Words*, is born with them. (Athenaeus, *Deipnosophistae* 3.89d)

Naturally Pamphilus was also heir to the more straightforwardly linguistic concern with matters such as etymology or rare dialectal words and their spread across the Greek-speaking world. This rich blend of information was achieved through the use of specialist sources (such as authors on bread-making), as well as predecessors in the field of lexicography, supported by quotations from various literary works and references to particular groups of speakers and their dialects:

Διόδωρος δ' ἐν Ἰταλικάῃς Γλώσσαις καὶ Ἡράκλειτος, ὡς φησι Πάμφιλος, τὴν κοτύλην καλεῖσθαι καὶ ἡμῖναν, παρατιθέμενος Ἐπιχάρμου· καὶ πλεῖν ὕδωρ διπλάσιον χλιαρόν, ἡμῖνας δύο. καὶ Σώφρων· κατὰστρεψον, τέκνον, τὰν ἡμῖναν

Diodorus in his *Italic Glossai* and Heracleitus, as Pamphilus reports, (say that) the 'kotyle' is also called 'hemina',⁵⁶ citing Epicharmus: 'and to drink twice as much warm water, two hemina'; and Sophron: 'turn the hemina, son, bottoms up!' (Athenaeus, *Deipnosophistae* 11.479a)

καὶ πέμμα δέ τι τευθίδα ὀνομάζειν Ἰατροκλέα ἐν Ἀρτοποιικῷ φησι Πάμφιλος.

Pamphilus says that Hiatrocles in his *Bread-making Book* names a type of cake 'teuthis' (squid) (Athenaeus, *Deipnosophistae* 7.326e)

The practice of collecting and compiling systematically from a large array of sources was firmly grounded in the tradition of Alexandrian scholarship, where it was made possible by the availability of an unprecedented supply of written resources in the library. With Pamphilus' lexicon this tradition reached a culmination of sorts, since after his time Greek scholarship entered a phase of abridgement and/or conscious selectiveness and exclusivity, exemplified in the Atticist lexica and the treatises of formal grammar. It is significant for the nature of Pamphilus' project that he also ventured into the field of 'science' or natural history, producing a treatise *Περὶ βοτάνων* (*On healing herbs*), which was castigated by Galen for not being scientific enough (Galen, *SMT*, XI 792–794 K; 797–798 K). We would also have liked to know more about his *Λειμών* (*Meadow*),⁵⁷ because this title is among those mentioned by both Pliny and Gellius as characteristic of miscellanist

⁵⁶ A doric form, associated in particular with the regions of Crete and Syracuse; it was also borrowed by the Romans (*hemina* = half a *sextarius*, cf. Plautus, *Miles Gloriosus* 831, Pliny, *NH* 21.185, *al.*)

⁵⁷ See *Souda* π 142, cited above, p. 79.

attempts that were ambitious, perhaps even pretentious, but not structured or useful enough.⁵⁸

Conclusion

In conclusion, we may observe that the gigantic compilations of Dorotheus and Pamphilus represent a culmination of sorts for Alexandrian encyclopaedism, at least as far as their monumental size is concerned, because we do not hear of anything on that scale in subsequent years. These works embody the idea of comprehensiveness that is at the heart of Alexandrian encyclopaedism by taking the Greek language as their subject, and then going far beyond mere lexical definitions to offer an extensive inventory of historical, scientific, literary and cultural tradition and knowledge. Thus lexicography is shown to be a path towards comprehensiveness through engagement with language and semantics. In the course of this chapter we have also seen that, apart from the study of language itself, the survey of literature and written wisdom can also lead to works of encyclopaedic aspirations, as in the case of Callimachus' *Pinakes*. The concentration of unprecedented library resources in Alexandria certainly helped and probably even motivated Callimachus' project of assembling and classifying authors and works to represent 'all branches of learning'. It may seem slightly more surprising to find the works ascribed to a single author, namely Homer, eliciting a comparable mobilisation of universal knowledge. As we saw above, this was due to the special status held by Homer as a major reference point for Greek religion and culture as well as the basis of Greek education, which led to particularly intensive and broad-ranging commentary activity.

These three examples from the work of Alexandrian scholars have provided an opportunity to observe some practical manifestations of the drive towards comprehensive knowledge. This drive had been a political imperative underpinning the establishment and endowment of the library by the Ptolemaic dynasty, and the same ideology also enabled the Hellenised monumentalisation of non-Greek historical traditions and cultural heritage, as we saw above. The Ptolemaic project resulted in a magnificent collection of resources and expert personnel, which continued to have an impact under Roman imperial patronage too. Looking beyond these political roots of encyclopaedism, this chapter has drawn attention to their practical

⁵⁸ Pliny, *NH* preface 24; Gellius, *Noct. Att.* preface 5, cf. 6–9.

implications within the library, which include the development of sophisticated methods of cataloguing and arrangement as well as selection and re-organisation of material from a broad range of sources. These techniques and methods for producing new knowledge by marshalling vast amounts of information from existing sources subsequently became central to the composition of most works that are characterised as encyclopaedic. The key characteristic that defines the origins of Alexandrian encyclopaedism is that these techniques developed primarily in the context of the professional and systematic study of Greek literature and language in the Alexandrian library. The Ptolemaic dream of cultural hegemony through the accumulation of all knowledge in one city continued to take shape in the library over several centuries. It was realised in the output of the scholars working there, and thus Alexandrian encyclopaedic works such as the ones discussed above reflect the central priorities of accumulating, organising, cataloguing, interpreting and safeguarding Greek language, literature and culture.

The burdensome mission of Pliny's *Natural History*

MARY BEAGON

Introduction: *nobis Quiritium solis*; sole authorship of an all-embracing work

At the very end of his *Natural History*, Pliny asks Nature to be mindful of the fact that he alone has praised her in all her aspects (37.205).¹ His claim to comprehensiveness, together with his comments on making knowledge lucid and accessible² are recognisable today as essential ingredients of the modern encyclopaedia. Less in keeping with modern encyclopaedic practice, however, is his claim to sole authorship. In this, of course, he adheres to the norm of antiquity, even in the case of large compilatory works, and other authors besides Pliny evince pride in their lone efforts to encapsulate entire libraries of knowledge.³ Nonetheless, Pliny is particularly keen to highlight the *Natural History* as a solitary effort: in his preface, he asserts that no other individual, Roman or Greek, has attempted to take on single-handedly all the subjects covered in his work: '*nemo . . . qui unus omnia ea tractaverit*' (preface 14). To expect the editor-in-chief of a modern encyclopaedia to be its sole contributor would strike us as bizarre, not to mention impracticable. The impracticality was not so pressing an issue in Pliny's era: Rome's confidence in her ability to hold an empire coextensive with that of nature was matched by her attempts to marshal the sum of knowledge into an ordered whole. Pliny's work was one of a number of projects of the late republic and early empire designed to systematise and bring under Roman control all that was known in fields as diverse as religion, philosophy, law and architecture.⁴ When Cicero praised Varro, arguably the most learned Roman of

¹ 'Hail, Nature, parent of all things, and in recognition of the fact that I alone of the citizens of Rome have praised you in all your manifestations, look favourably upon me.' (*Salve, parens rerum omnium Natura, teque nobis Quiritium solis celebratam esse numeris omnibus tuis fave*).

² 'It is a difficult task to give novelty to the old, authority to the new, brilliance to the common-place, lucidity to the obscure, attractiveness to the stale, credibility to the doubtful . . .' (*res ardua vetustis novitatem dare, novis auctoritatem, obsoletis nitorem, obscuris lucem, fastiditis gratiam, dubiis fidem* . . . preface 15).

³ Diodorus Siculus, *Biblio*. 1.1.1; 1.3.6; Jacob (2000): 85–110; Too (2000): 111–23; Too (2010): 83–142. The sophist Longinus was described as βιβλιοθήκη ἑμψυχος (Eunapius, *Vit. Soph.* 456).

⁴ Rawson (1991) 324–51.

his day, he declared that the polymath's many writings on all aspects of Roman life, custom and tradition had at last made his fellow-citizens truly at home in their own city (*Academica Posteriora* 1.9). Self-knowledge and self-confidence lie at the heart of cultural power and possession. It is a logical step to Pliny's individual enterprise, the presentation in a single work of the entire natural world to his fellow-citizens, familiarising them with the knowledge which would confirm their cultural possession of an empire coterminous with nature.

However, Pliny's evident pride in the unique and unparalleled nature of his achievement requires further explanation. In one sense, of course, his comments belong to the conventions of ancient literary *aemulatio*, the authorial competitiveness by which a claim to cultural authority was established, integrating the claimant with, yet distinguishing him from, his literary peers past and present. Virgil had used a claim of primacy to announce that his forthcoming project was literally of epic proportions (*Georgics* 3.10–11).⁵ In Lucretius' monumental Epicurean poem *On Nature*, his hero is said to have been the first to breach the secrets of Nature (*De rerum natura* 1.66–71), a claim transferable to the author himself. Whether Pliny's Stoic-inspired work was in any sense a challenge to this is difficult to say.⁶

However, Pliny's claim to uniqueness may be justified in a more straightforward sense. His work is not only more totalising than those of the Greeks, 'none of whom has tackled singlehandedly' all the subjects which Pliny has covered in one work (preface 14); it is also, so far as we can tell, different in conception from the works of his Roman predecessors. As we saw in [chapter 2](#), commentators on the encyclopaedic tradition have often been tempted to fit the *Natural History* into a scheme of development in which it is preceded by Varro's *Disciplinae* and Celsus' *Arts*,⁷ with their divisions into books devoted to separate subjects, and followed ultimately by the medieval system of the seven liberal arts. As far as purpose is concerned, Pliny does exhibit a desire for comprehensiveness and a utilitarian outlook, whose significance will become apparent shortly. However, he holds this in common not just with his Roman predecessors but with a far wider

⁵ For his claim as a means of establishing a complex literary relationship with previous epics, see Hinds (1998) 53–5.

⁶ There is no clear evidence. Despite his predominantly Stoic tone, he echoes Epicurean arguments for the dissolution of the soul on death (7.189), while condemning the Epicurean theory of multiple universes (2.1–13), but whether these are reminiscences of the poet cannot be proven.

⁷ Too little is known of Cato's fragmentary work to determine how 'encyclopaedic' it really was: see Astin (1978) 332–40.

intellectual tradition, whose roots go back to the sophists and their claim to teach all the *artes* needed for practical living and which manifests itself in a variety of large-scale, compilatory and universalising writings. Some parallels in both intention and scope may, for instance, be seen in the Greek Diodorus Siculus' universal history, whose title of *Library* Pliny approves, in contrast to the silly and affected titles dreamt up by many of his compatriots (preface 24–5). Diodorus' vision of a cosmopolitan humanity in a providential universe, for whose common benefit he constructs with considerable effort a universalising history (*Biblio.* 1.1–3), has similarities with Pliny's Stoicising and utilitarian outlook, which leads him to attempt the difficult task of producing a 'history' of the whole of nature for the good of humanity (preface 15–16).

However, Pliny's conception of how to deliver the encyclopaedic package is difficult to parallel. He has a unitary and unifying theme, famously declaring his subject to be 'nature, that is, life', and his work is nature-shaped, following the traditional Aristotelian *scala naturae* through the animal, vegetable and mineral kingdoms, with the addition of human interaction with nature at every level. It is not a handbook of individual *artes*, nor does its material have the randomness of many of the compilations or miscellanies. Instead, his Stoicising outlook produces a coherent, cohesive whole, which, like the Stoic nature itself, bears the mark of rational creativity. Whereas Varro had produced, in addition to the *Disciplinae*, vast separate works on history, religion, customs, agriculture and much else, Pliny integrated elements of all these into a monolithic, self-contained work, 'at once the work of nature and nature itself', as he describes the world in 2.1–2: a challenge likely to derail any potential literary competition.

It is, however, misleading to read claims to primacy and uniqueness solely within the context of intellectual and literary activity. In a sense, these were merely symptomatic of a much deeper trend in ancient, particularly Roman aristocratic, society. Pliny's claim to uniqueness can be situated in the broader context of the competitive ethos which was deeply ingrained in the outlook of the Roman elite in their striving for political and social pre-eminence. In the rest of this paper, I shall try to show how Pliny's text encapsulated the essence of this outlook, not only in its conception but also in its actual content. To begin with, I shall consider instances in the *Natural History* where an interplay can be discerned between traditional elements of political primacy at Rome and the concept of literary pre-eminence. The discussion will then focus, in the following sections, on the development of this motif within the paradoxical but crucial moral restraints imposed by the principle *pro bono publico*.

The archetypal statement of aristocratic competitiveness is preserved by Pliny himself in his quotation of the funeral eulogy given in 221 BC for Lucius Metellus by his son Quintus. Here, the accumulated superlatives emphasising the dead man's supremacy in a variety of fields of achievement are summarised by Pliny as follows: 'According to the son, all these things had been achieved by his father, *and by no one else since the foundation of Rome (nec ulli alii post Romam conditam)*' (7.140, my italics); to which we may compare Pliny's self-evaluation of his literary uniqueness: 'I alone of the citizens of Rome' (*nobis Quiritium solis*, 37.205).

At this point it might be objected that Pliny does in fact acknowledge assistance, and in equally proud tones: he has culled his information from no fewer than 2,000 books by 100 authors, very few of which, owing to the obscurity of their contents, have attracted the attention of other scholars (preface 17). Later, he turns from numbers to names, stressing that, unlike many other authors in antiquity, he intends to acknowledge his debt to earlier writers by listing them in the indices which make up the whole of Book 1 of the *Natural History*. The indices and Pliny's motives for providing them raise issues which it is not the intention of this paper to pursue.⁸ For our present purposes, however, we can note that both the enumeration and naming of sources is in part directly related to the competitive ethos just discussed. Capping your competitors' figures in terms of, for example, the numbers of enemies killed, ships captured or, as so often featured in the zoological books of the *Natural History*, the quantities of animals shown in the arena,⁹ gave precision to your claims of superiority, unanswerable except by higher figures. The listing of names produced a cumulative sense of incontestable superiority, as seen, for example, in those victory inscriptions which meticulously listed all the conquered peoples, such as that of Augustus at La Turbie (3.136). Often, of course, the two techniques were employed side by side, as seen throughout Augustus' *Res Gestae* and evidenced in many of the anecdotes of achievement in *Natural History* Book 7.¹⁰

Since Rome's literary elite was essentially drawn from its political elite, it is not surprising to find parallels between literary and political *aemulatio*. What is remarkable about the *Natural History* is the way such parallels are woven into its purpose and its very fabric. This is evident at a number of levels, from simple correspondence to allusion and metaphor. The general association between Pliny's assertions of primacy in the prologue and final lines of Book 37 and the assertions in the Metellan *laudatio* has already

⁸ See Naas (2002) 172–94. ⁹ E.g. 8.64–5, 96, 131.

¹⁰ Especially 7.91–106. See below, p. 94 on the records of Pompey's conquests. For the significance of lists on monuments, see Nicolet (1991) 72; cf. Purcell (1990) 178–82.

been noted, as has that between the enumeration of multiple sources and that of the victims and spoils of politico-military supremacy. Before we explore more avenues, we should note three occasions where Pliny makes a self-conscious effort to bring political and literary activity into a direct correspondence. Two occur in the preface. An imperial dedicatee (in Pliny's case, Titus), self-deprecatory comments on aridity of subject matter and mediocrity of literary accomplishment, together with assurances nonetheless of a diligence which uses the hours of darkness for study: all these were established *topoi* of literary prefaces by Pliny's time.¹¹ More idiosyncratic, however, is the way in which Pliny draws his nocturnal literary labours into a direct parallel with his diurnal public duties as an imperial official (preface 18–19). The two activities are complementary rather than opposed; his studies ensure Pliny is adding hours to his life, since, in his famous phrase, life is being awake (preface 19). His balance of services to Rome's empire and services to nature's empire – his doubling of his own life – benefits his imperial master and dedicatee twice over. The second elaborated correspondence revolves around the figure of Titus himself in preface 2–5. Here again, the individual motifs of extravagant laudatory references to imperial power and glory occasion no surprise.¹² More interesting is the fulsome flattery of Titus' literary skills. What marks Pliny's treatment out is the striking series of metaphors by which he clothes Titus' intellectual primacy in the trappings of political authority: the *fascēs* of his genius, the (punning) dictatorial powers of eloquence and the tribunician authority of his wit (*ingenii fascibus . . . dictatoria vis eloquentiae, tribunicia potestas facundiae*).

Finally, in Book 7's encomium of Cicero (116–7), the metaphorical interplay between political power and intellectual accomplishment is enhanced by the vital contribution oratory made to the statesman's political pre-eminence. A series of Cicero's political triumphs is attributed to his eloquence, culminating in another punning metaphor: 'it was you who proscribed Mark Antony', a reference to his famous series of speeches denouncing the latter, the *Philippics*. To the political title 'Father of his country' which he won for dealing with Catiline's conspiracy, Pliny adds that of 'Father of oratory and Latin literature'; a civilian, he nonetheless won a triumph and a laurel wreath for eloquence. The final line goes beyond the equation of political with literary pre-eminence to suggest that the latter is superior to the former, when Pliny quotes Caesar as saying that these literary laurels were greater than those of a military triumph, since it is a greater thing to have advanced the frontiers of Rome's genius than those

¹¹ Janson (1964) 97–106.

¹² Janson (1964) 100–6.

of her empire. The rhetorical language used throughout the encomium, together with this final assertion of intellectual superiority, may serve as a legitimisation of Pliny's own literary endeavour and his claims to primacy.¹³

In the following sections we shall consider some of the ways in which Pliny's encyclopaedic enterprise is informed by the values of elite competition. Its keynote, however, lies in an all-important proviso to the principle of individual attainment. Striving for supremacy over others was truly admirable only if it was conducted in pursuit of the common good.

***Labores pro bono publico* I: ancestral exemplars, imperial imitators**

Cicero famously condemned Caesar's excuse that he was forced into civil war by the opposition's attempt to undermine his *dignitas*, or standing in society: what, he said, is *dignitas* without honour (*To Atticus* 7.11)? Impotent to stop the clash between Caesar and Pompey, he recalls his own depiction of the ideal statesman in his *De republica*, whose objective must always be the welfare of his fellow-citizens (*To Atticus* 8.11.1–2; cf. *De republica* 5.6.8); a principle ignored by the current protagonists whose aims are entirely self-ish: 'both want to reign'. Great men of the past gained individual glory and pre-eminence by channelling their ambitions into services to their country and were consequently held up as role models to successive generations. The iconic status of these individuals was enhanced by the increasing popularity among the educated classes from the second century BC onwards of the doctrines of Euhemerus, which accorded immortality to humans who had performed outstanding services to humanity. Ennius' translation of Euhemerus' work was the major impetus, but elements of this mode of thought had already been developed in Greek philosophy. The Stoics, whose ethical doctrine laid emphasis on public service, were prominent advocates.¹⁴ Certain legendary figures were elevated by the School to the status of exemplary exponents of labouring on others' behalf, most importantly Hercules. The latter did not owe his pre-eminence in this guise entirely to the Stoics, but their advocacy certainly encouraged the absorption of this role model among the educated elite. Cicero, for example, could offer Hercules as an example of a man who achieved divine honours from his fellow men in

¹³ For more detail on Pliny's treatment of Cicero, see Beagon (2005) 306–10. Note also his evaluation of Varro's being the first statue of a living person to be placed in a library: a crowning glory equal to the naval crown he won in the war against the pirates (7.115–6).

¹⁴ Cicero, *ND* 1.38, attributes its development in the School to Zeno's pupil Persaeus.

gratitude for his public services; a blueprint for all distinguished Romans whose benefactions to their country can be expected to raise them ultimately to the heavens.¹⁵

However, the glamour of personal glory did not always sit easily with obligations to others. The Roman elite ethos tended to regard public recognition of an individual's achievements as an integral part of his glory, since it endorsed his *dignitas* or public standing. It is hardly surprising that some individuals were guilty of promoting themselves with no regard to public obligation, as Cicero suggests of Caesar. Stoic teaching increased the tension, since it frequently suggested that the outward trappings of glory were 'indifferent' and thus irrelevant to the virtuous life.¹⁶ Pliny makes this point in connection with the career of M. Sergius Silus, whose outstanding valour earned him no official civic honours, since it was exhibited in the most notorious defeats of the Punic wars (7.106).¹⁷ Seneca (*Epistulae morales* 95.63–6; *De beneficiis* 1.13; 7.3.1) writes disapprovingly of both Caesar and Pompey, as well as Alexander the Great, because their emulation of Hercules amounted to a selfish pursuit of glory with no thought for their wider obligations. Possibly he was not entirely happy with Hercules' own suitability as an icon of selflessness. Although he doesn't condemn the hero, he evidently considers that some emulators did not get sufficiently clear ethical guidance from his example¹⁸ and prefers to jettison him as being outmoded and redolent of a less sophisticated age. In his place he would install a more recent and quintessentially Roman – and Stoic – *exemplum*, the younger Cato, who replaced monster-smashing and globe-carrying with a struggle against the enemies of political liberty and a single-handed sustaining of the republic, to the point where he and freedom collapsed and died together (*De constantia sapientis* 1.2): another hero glorious in defeat.¹⁹

¹⁵ ND 2.62: 'men who conferred outstanding benefits were translated to heaven . . . They include Hercules, Castor and Pollux, Aesculapius, and Liber'. Such a reward is promised to Scipio: (*Somn. Scip.* 16): 'Love justice and duty, especially to your country. Such a life is the road to the skies, to that gathering of those who have completed their earthly lives'. Cf. Ennius *Epig.* fr. 23–4 V³, partially quoted by Cicero in *Tusc.* 5.49. See also *Fin.* 3.66; *Tusc.* 1.27–8; *Off.* 3.25; *Leg.* 2.19.

¹⁶ See e.g. Cicero, *Fin.* 3.51; Seneca, *Ad Marc.* 10.1ff; *Tranq. An.* 1.10; 3.4; *Ep.* 102.17.

¹⁷ See Beagon (2002) 111–32; (2005) 55–6, 293–8.

¹⁸ In general, the Stoics simply ignored less appropriate aspects of the Hercules tradition, though Epictetus makes a gallant effort to incorporate the hero's philandering neglect of successive wives and children into the concept of the Stoic *cosmopolis*, in which universal ties exist between humanity and no one is an orphan (3.24.13). On Hercules in Seneca, see Fitch (1987) 40–4. Genres such as tragedy (*Hercules Furens*) and satire (e.g. the *Apocolocyntosis*) had their own takes on the Herculean image. Cf. Shelton (1978) 12–4; Blanshard (2005) 88.

¹⁹ In some instances it could be argued that the *labores* of paragons of personal integrity were no more likely to be conducive to the public good than the strivings of those motivated solely by

For everyday purposes, however, a common-sense attitude allowed the acceptance of a large gallery of great statesmen who were considered to have served their country well. As Cicero himself declared in his *de Amicitia* (18–9), Stoic notions of perfection were generally unrealistic and it was better to accept the judgements handed down by Roman tradition as to suitable role models for real life. Literary portrayals of such men in non-philosophical texts tended to absorb Stoic, Euhemeristic and Herculean strands in a more general and less critically self-conscious way, as can be seen in Silius Italicus' portrayal of a number of the traditional Roman *exempla virtutis* (examples of excellence), including Fabius, Scipio and Regulus.²⁰ Endurance and performance of duty for the common good had characterised Virgil's Aeneas.²¹ Pliny himself, as we shall see, celebrated individual services to humanity in various ways. For the moment, however, we shall note his creation of contemporary *exempla virtutis* in his famous encomium of Vespasian and his sons in 2.18: 'For mortal man to help his fellow, that is god, and this is the road to eternal glory.' He proceeds to link this sentiment with the Roman leaders of old and then with Vespasian himself: 'by this road went our Roman leaders, by this road now proceeds with heavenly step the greatest ruler of all time, Vespasian Augustus, with his two sons, coming to the aid of an exhausted world. To enrol such men among the divinities is the most ancient way of paying them for their benefactions.'²²

The importance of attaining pre-eminence through public service was thus well-established in political ideology and was duly reflected in literary portrayals of Rome's leaders, past and present. We shall now see how the stress on selfless service as the true road to primacy was frequently replicated in the programmatic declarations found in compilatory and encyclopaedic literature.

personal glory. It might be asked who benefited from Sergius' glorious defeats or the conspicuous self-sacrifice of Regulus. In the sphere of practical politics, such individuals could on occasion be dangerous: even the well-disposed could take a dim view of overly scrupulous behaviour if it appeared to hinder the greater good on a point of principle: witness Cicero's exasperated comments on the principled political stance of Cato as being a liability in the murky world of real-life politics (*Att.* 2.1.8).

²⁰ E.g. *Punica* 6.451–4, 545–6; 7.547–70; 15.18–128; 17.645–54. See Bassett (1966) 258–73; Colish (1985) I, 283–8.

²¹ From the huge literature, see e.g. Garrison (1992) *passim*; McGushin (1964) 225–43; Galinsky (1966) and (1972): 143–9; Colish (1985) I, 235–7; Hardie (1986) 281, 372–3.

²² *Deus est mortali iuvare mortalem, et haec ad aeternam gloriam via. Hac procures iere Romani, hac nunc caelesti passu cum liberis suis vadit maximus omnis aevi rector Vespasianus Augustus fessis rebus subveniens. Hic est vetustissimus referendi bene merentibus gratiam mos, ut tales numinibus adscribant.*

Labores pro bono publico II: the encyclopaedic mission

Vitruvius had entertained the hope that his work would be a service destined to win general gratitude (*munus omnibus gentibus non ingratum futurum*, 6 preface, 7), placing his beneficent purpose in a timeless universalising context. For Pliny, too, his lone labours were not only comprehensive; they were also selfless and beneficial. He assures his imperial dedicatee, Titus, that he has ‘preferred the useful service of overcoming difficulties to the popular one of giving pleasure’ (preface 16). We might recall at this point his nephew’s anxiety to assure his readers that his uncle’s intellectual curiosity to view the eruption of Vesuvius ultimately evolved into a humanitarian rescue attempt (*Letter* 6.16.9).

Yet although, in the second century AD, Aulus Gellius was to call intellectual activities ‘labours’, emphasis was not always on their public utility. They were also pleasures, regarded primarily as occupations for the *otium*, or leisure time, of the Roman gentleman (*Attic Nights*, preface 23) and subordinate to the superior claims of public and private business. In Cicero’s era, even the use of leisure time for such activities had required justification, and, in the *Pro Archia*, he had had to argue that his own literary studies strengthened his rhetoric and offered moral *exempla* of direct relevance to public life (12–15). Reading for pleasure could, it was true, have a civilising effect, but it is evident that the closer the relationship between intellectual activities and public duties, the easier it was for many members of Rome’s elite to accept them. One solution was to identify literary labours with public service, as Vitruvius and Pliny do. At the same time as the latter emphasises his own utilitarian motives, he criticises Livy for writing his history for his own pleasure, rather than as a service to Rome (preface 16–7).

That encyclopaedic and compilatory works were in effect a kind of public service is reflected in a literary *topos* familiar from a number of authors, all of whom claim that their writings offer a labour-saving path to knowledge for the busy man of affairs. Vitruvius and Diodorus Siculus claim that their works ensure that their readers will find all available information on their subject in one work.²³ While miscellanies might recommend themselves by their preselection of the ‘best bits’ (Gellius *Attic Nights*, preface 12),²⁴ the encyclopaedic or universalising works’ selling-point was a one-stop comprehensiveness, though inevitably this was, in its own way, equally selective or incomplete (cf. Pliny, preface 17). Writers of utilitarian and compilatory works, therefore, were performing a public service, labouring to ensure that

²³ Diodorus Siculus 1.3.8; Vitruvius 5 preface, 5; Janson (1964) 152–5; Vardi (2004) 167.

²⁴ Holford-Strevens (2003) 28–9.

those already burdened with affairs would not be weighed down further by their quest for information. The wide-ranging non-specialist knowledge they provided was increasingly seen as a necessity for the properly educated gentleman. Gellius was insistent that even the busiest of men should use all his spare time to improve himself and depicts reading and discussion going on at odd moments of the day.²⁵ Later still, the ideal is seen in Athenaeus' Larensis, burdened with public duties but equally persistent in his studies.²⁶

Claims to utility were strengthened by the implied or explicit recognition of a large audience. Thus, the comprehensiveness of such works was not in fact directed solely at the individual dedicatee: Pliny draws Titus' attention to the index provided for his use and that of 'others' (preface 33), as well as deprecatingly suggesting that his material should be aimed at a less sophisticated audience (preface 6), and one modern critic has surmised that authorial suggestions that imperial dedicatees might actually read the works offered to them increasingly became a polite fiction.²⁷ Just as Vitruvius had hinted at a timeless universality, so too, a later admirer and imitator of Pliny, Peter Martyr, described the *Natural History* as a public service for 'posterity as well as princes'.²⁸ His comments are a reminder that compilatory works played an important role in the transmission of a cumulative intellectual heritage, a Herculean 'burden' for which responsibility must ultimately pass to future generations. This is a topic beyond the scope of the current paper, although I shall return briefly to it in the final section.

Utilitas vitae: the life-enhancing nature of 'nature, that is, life'

In the last section, we considered proclamations of public service and utility common to encyclopaedic and compilatory works in general. In this section,

²⁵ Vardi (2004) 182. ²⁶ Braund (2000). ²⁷ Janson (1964) 103.

²⁸ He forestalls criticism for sending *minutiae* to a busy Pope: Pliny and others who addressed detailed works to rulers did so not because they expected them to be useful only to the dedicatee but also to posterity. To this end they 'mingled together obscure reports and positive knowledge, great things and small, generalities and details; to the end that posterity might, equally with the princes, learn everything together and also in the hope that those who crave details and are interested in novelties might be able to distinguish between different countries and regions, the earth's products, national customs and the nature of things' (*De Orbe Novo* 3.9.15; Mazzacane and Magioncalda (2005); trans. MacNutt (1912) I, 305). However, Peter Martyr appears to have been luckier than his ancient counterparts in securing his official dedicatee's attention: Leo X read his work to an attentive audience consisting of his sister and numerous cardinals. (*De Orbe Novo*, 3.9.84; Mazzacane and Magioncalda (2005)); cf. Peter Martyr, *Opus Epistolarum* 557, December 1515 (Woldan (1966) 552); see Gerbi (1985) 59; and Lunardi, Magioncalda and Mazzacane (1992) for translation.

I shall argue that the *Natural History* is particularly, and probably uniquely, adapted to the concept of universal service through the emphasis Pliny is anxious to lay on what we may term its humanitarian theme. His outlook combined traditional Roman values and patriotism with a Stoicising view of an anthropocentric nature and the increasing interest in practical ethics exhibited by that school. An encyclopaedic project which embraces the whole of nature and every aspect of human interaction with nature allows him to claim an unchallengeable position as a benefactor labouring for the good of humanity. The content of his work highlights this humanitarian ideal in several ways.

I start with a straightforward example. We have already noted the tribute to Vespasian and his sons as benefactors of humanity on their way to immortality. A number of famous Roman statesmen and generals of earlier generations are also assessed in respect of the correlation between their fame and their contribution to their countrymen's well-being and *humana salus* ('human well-being') generally. Mass human slaughter, even if unavoidable (*coactam*, 7.92), can mar the careers of some of Rome's greatest generals, as in the case of Caesar (7.92).²⁹ Far worse, however, is Sulla's deliberate murder of his own fellow-citizens in his bid for personal power, which gains him Pliny's wholesale condemnation (7.137–8).³⁰ Pompey fares better: his emulation of Alexander and Hercules is mentioned (7.95), but rather than raise doubts about his motivation as Cicero and Seneca had done,³¹ Pliny celebrates his conquests as gains made on behalf of his country (7.97), although he admits that Caesar's imperial conquests were, ultimately, even greater. Pompey's claims to primacy as world conqueror had been impressive and Pliny quotes from official records which duly enumerated and listed the conquered lands, seas and peoples in the competitive spirit of the examples discussed in the first section above.³² However, the award for pre-eminent statesmanship is given to Cicero's hero, the younger Scipio, who is described as outstanding in the 'three supreme human achievements' as orator, general and statesman (7.100). The Metellan *laudatio*, with its enumeration of the ten greatest achievements for a prominent Roman, comes to mind. He is closely followed by the elder Cato, the traditional epitome of old Roman values. The latter loses out slightly to Scipio, in Pliny's opinion, because he

²⁹ The sources give large casualties for the Gallic wars: 400,000 (Velleius 2.47) or even 1,000,000 (Plutarch, *Caes.* 15). On Pliny's moralising stance here and for the interesting case of the citizen casualties in the civil war (on which Pliny claims Caesar kept silent), see Beagon (2005) 277–8.

³⁰ See below, n. 73. ³¹ See above, p. 90.

³² His trophy in the Pyrenees, a dedicatory inscription in his temple of Minerva and an official notice of his third triumph in 61 BC: 7.97–8.

had managed to incur the odium of large numbers of his fellow-citizens, thanks to his litigiousness.³³

Pliny's treatment of these political figures is mainly confined to his discussion of human achievement in Book 7, but the themes of patriotism and concern for the well-being of humanity, especially fellow-citizens, underlie it. A more prominent and pervasive theme, and one that is unique to the enterprise of the *Natural History*, is the celebration of those products of nature which are beneficial to humanity and those who contributed to the process of familiarising their fellow men with these gifts of nature. Where Cato does come into his own for Pliny is in the service he has done humanity through his work on farming and the many medical remedies derived from the products of the farm, kitchen garden and countryside contained therein. Pliny notes with approval Cato's hands-on practicality in this respect; he had compiled a notebook of such remedies and used them to treat his own family and slaves (29.15–6). How different from the Greek doctors whom Cato famously denounced for producing elaborate and expensive concoctions intended to defraud or even kill the sick (29.11). These attitudes confirmed Cato's pre-eminence in Pliny's eyes; it was this patriotic and practical humanitarian outlook, rather than the conventional, glittering rewards of a political career, which confirmed his *auctoritas*: 'his authority is little enhanced by his triumph and censorship; so much more comes from his character' (29.13). The selfless service of the Stoicised hero, of M. Sergius or Seneca's younger Cato, is evoked.³⁴ Every area of 'nature, that is, life' offers humanity products to improve life. On his literary journey through nature, Pliny continually emphasises the useful and the life-enhancing: *utilitas vitae*, *vitae prodest* ('usefulness to life', 'beneficial to life') and variants are key phrases.³⁵ The allegorical rationalising which produced Euhemerism could envisage the development of religion from the deification not only of human benefactors but also of the everyday vital substances they discovered or championed. Such, at any rate, was the idea attributed to the sophist Prodicus and reflected in Stoic religious allegory.³⁶ In Pliny's encyclopaedic project, comprehensiveness encourages the inclusion of all parts of nature, but what he apologetically terms its 'least elevated' (*sordidissima sui parte*) areas get considerably more coverage than high heroics,

³³ Living under imperial rule, Pliny was no doubt particularly aware of the importance of diplomacy in public life. See above, n. 19 on Cato's great-grandson and Beagon (1992) 15, 17 on Pliny himself as the practical *vir bonus*.

³⁴ *M. Catone . . . cuius auctoritati triumphus atque censura minimum conferunt, tanto plus in ipso est.*

³⁵ 25.25, 28.2, cf. 22.1, 22.15, 23.1, 24.1, 4, 26.10, 27.3.

³⁶ E.g. Sextus Empiricus, *Adv. Math.* 9.18; Cicero, *ND.* 2.60.

since they contribute proportionately more to human needs on an everyday basis. Basic herbal remedies exemplify this paradox of the lowliest elements of nature fulfilling the most vital (literally) of utilitarian services to humanity. No fewer than seven out of thirty-seven books deal with the uses of plants for medicinal purposes: even the most unattractive-looking may be life-improving (*vitae salutare*).³⁷

The original champions of nature's products were of course rarely identifiable. However, the cataloguing of putative (mainly mythical and/or eponymous) discoverers and inventors had a complex cultural ancestry; it drew on various aspects of sophistic and Peripatetic thought, general Hellenistic scholarship and, as we have seen, Euhemeristic ideas.³⁸ Pliny includes such a catalogue at the end of his discussion of human achievement in Book 7. More significant is his emphasis elsewhere on the importance of such selfless activity, in the context of natural remedies. 'It was a great honour to discover a plant and be of assistance to life (*vitam iuvare*)', says Pliny in 25.22, 'though some may think my researches are insignificant; so worthless in the eyes of luxury are even things which are beneficial to life'.³⁹ In this way, he identifies his literary endeavour with the efforts of these iconic life-enhancing benefactors of humanity; a statement of authorial purpose more crucial to the understanding of his project than the list of discoverers in itself. As for the list, the predominance among the historical characters of Mithridates and other Pontic kings reflects the reputation of the Black Sea area for medico-magical potency, as well as the king's well-known interest in medicine.⁴⁰ The most frequently mentioned mythical benefactors include, predictably, the centaur Chiron and the hero Asclepius, who were well established in medical mythology. Mercury's connection with circulation and trade made him a popular choice as facilitator of beneficial products. Hercules was perhaps less obvious, but was a general guardian and protector,

³⁷ E.g. 25.4. Despite nature's overall beneficence (18.2–5), Pliny recognised the problem of dangerous natural substances. He declares that those whose usages are primarily harmful or criminal will be excluded from his work (25.25). Does the principle of *pro bono publico* therefore, in a sense, work against encyclopaedic inclusivity? The effect is probably marginal, as many remedies were multi-purpose and those with potentially harmful side-effects are described, with appropriate warnings (20.200–1; 21.147; 26.17; 27.53; 27.79). Moral dangers, too, are signposted: e.g. from the greed engendered by mining (33.1–3).

³⁸ See Beagon (2005) 416–20 for references.

³⁹ The tendency of luxury and over-sophistication to distort value judgements is a leitmotif of the *Natural History*, but it does not lead Pliny to reject comfort and convenience in life and the adaptation of nature to these ends. See Beagon (1992) 75–9 and below, next section.

⁴⁰ Pontus' reputation: Braund (1994) 21; Pliny 7.17, with Beagon (2005) 133, 141–4. Mithridates' interest: 25.5–7. His work on poisons might seem problematic, in view of Pliny's 'life-enhancing' theme (n. 37 above). However, the emphasis is on his creation of antidotes for poison.

widely revered in Greece as *Alexikakos*, 'Averter of Evil' and invoked against many hazards of everyday life, including diseases and plagues. The famous Heracleian knot was reputed to heal a wound bound with it extra quickly, according to Pliny, while even wearing it on daily apparel was beneficial (*vim quondam . . . utilem*: 28.64).⁴¹

To be fully effective, life-assisting discoveries must be circulated as widely as possible. According to an apocryphal story repeated by Pliny (7.123), Hippocrates, after disseminating his medical services and his students throughout Greece to combat a plague, was given by its grateful people 'the honours given to Hercules'. Like Mercury, the globe-trotting Hercules may have been an iconic benefactor in this respect, but the concept also returns us to the Rome of Pliny's day. The Flavians strode forth in the footsteps of the *proceres Romani* as they sought to bring succour to a world ravaged by civil war (2.14); but the Roman people as a whole were also credited with globe-spanning benefactions, as they controlled a world-wide trade in healing plants. Exotics from the world's extremities traversed the length and breadth of the empire, 'all owing to the immeasurable greatness of the *pax Romana*', which controlled all of nature, inhabited and uninhabited, and the plants and other products therein (27.3). As 'a second sun', the Romans are equated to the mastermind of the universe in Stoic thought, just as the closing paragraphs of the *Natural History* (37.201) portray them as 'second mother' of the world in relation to the first mother, nature. From being benefactors labouring within nature, they have become identified with her as the ultimate source of all human benefits.

We saw in the previous section how the language of Pliny and other writers of large-scale works emphasised the magnitude and difficulty of their labours. In this, they drew on literary conventions but also mapped on to the heroics of those Roman leaders who were immortalised through their services to others. In the current section, we have seen how the *Natural History*'s theme of life in nature allowed Pliny to emphasise the importance of life-giving natural products and of those who discovered and disseminated these gifts of nature, including himself in his authorial capacity as preserver and disseminator of their discoveries and other benefits. Could

⁴¹ Plants named after individuals: 25.22–87; Mercury: 25.26, 38; Asclepius: 25.30; Chiron: 25.32, 33, 66; Hercules: 25.32, 34, 35 (described here as dangerous taken internally but evidently a wound healer, cf. 26.140, 147), 42 (also attributed to Achilles) and 75; Mithridates and other Pontic kings: 25.33, 62–3, 64, 65; Juba of Mauretania: 25.77–9; the doctors Themiso: 25.80 and, most recently Democrates: 25.87. For Hercules' apotropaic, including medical, functions, see Farnell (1921) 147–53, esp. 150–1; Paus. 9.24.3. Plague: Philostr., *Vit. Apoll.* 4.10, 8.10. Salowey (1995) 316 suggests plague connections arose out of his swamp-clearing activities, cf. next section. For the knot, Nicgorski (2005) 97–128.

literary benefactors such as Pliny expect a form of immortality to match their political counterparts? The notion that authors live on in their works is of course so ubiquitous as to have become a cliché. Sometimes, however, the ascent to immortality of the *proceres Romani* seems to be recalled in the language used. The reward of Scipio in Cicero's *Somnium Scipionis* is evoked by Vitruvius' prediction that the minds of those who direct their intellects towards the service of humanity will 'rise to heaven by the staircase of human remembrance'.⁴² Pliny's own equivalent to the 'road to eternal glory' traversed by Vespasian and his sons (2.18) is perhaps presaged by the Herculean choice he depicts himself as making in preferring the useful service of overcoming difficulties to the popularity of giving pleasure (preface 16). He has chosen an inhospitable road: 'the path is not a beaten highway of authorship, nor is it one in which the mind is eager to roam' (preface 14).⁴³ The underlying hope is surely that he will secure the immortality predicted for those whose minds are dedicated to *utilitas vitae*.

Ordering nature: roads through the wilderness

In this section, we shall consider the structuring of nature and of the *Natural History* itself to facilitate the concept of *utilitas vitae*. We shall first consider how this principle leads Pliny to do more than simply enumerate the beneficial elements of nature or to indicate their individual utilisation as foodstuffs, medicines, etc. Much enthusiasm is reserved for human utilisation on a far larger scale. In fact, he frequently seems to endorse a positive reconstruction of nature, in effect making her more 'user-friendly' than she is already. His comments once again offer a close parallel between his project and activities in the political sphere, in this case the utilitarian building projects undertaken by a number of Rome's leaders, which in turn evoke comparison with facets of Herculean activity as recounted in euhemerising accounts. The hero's activities could include changing the face of nature to meet human needs.⁴⁴ Next, we shall see that the civilising penetration of

⁴² *Ergo eorum virorum cogitata non solum ad mores corrigendos, sed etiam ad omnium utilitatem perpetuo sunt praeparata . . . ipsae autem per se mentes aeris altiora prospicientes memoriarum gradibus ad caelum elatae . . .* 'So then the imaginations of these men were directed throughout not only to the improvement of conduct but to the service of mankind . . . Their minds of themselves look upon the upper air and rise to heaven by the staircase of human remembrance . . .' (Vitruvius, *Arch.* 9. preface 15–16).

⁴³ *Praeterea iter est non trita auctoribus via nec qua peregrinari animus expetat.*

⁴⁴ Diodorus Siculus 17.3, 4–5, 18.6, 19.3–4, 22.1–2, 35.3; Dionysius Halicarnassus 1.41. Note, too, the later variations on the origins of the Pillars of Hercules, which suggested that they were

nature through a network of imperial roads offers a metaphor for Pliny's mission to bring order to the subject matter of his encyclopaedia of nature. Finally, Pliny's busy and frequently peripatetic schedule as public official offered a challenging environment for the production of his monumental work. I consider how a stable and coherent composition could emerge from such a frenetic lifestyle.

Pliny's definition of 'nature' to include the use of her products in the human arts and sciences results not only in books devoted to plants and the remedies derived from them but also in a detailed treatment, in five books, of art and architecture in the context of nature's mineral resources: her pigments, metals and stones. Among these works, the highest praise is reserved for utilitarian works of engineering. Whereas human alteration of the natural landscape for reasons of self-aggrandisement might excite moral opprobrium on the part of Pliny and other writers,⁴⁵ alterations whose motivation was *utilitas vitae* receive unstinted praise. Pliny marvels at Rome's aqueducts, the Fucine lake drainage scheme, the harbour works at Ostia, the roads cut through mountains, the bridges and the sea-defences. All are unsurpassed miracles of genuine worth (*vera aestimatione invicta miracula*, 36.121). A prominent benefactor in this respect had been Augustus' right-hand man, Marcus Agrippa, whose extensive work on Rome's water supply, public baths and sewers is mentioned by Pliny on a number of occasions.⁴⁶

Of the imperial successors of Hercules, Pliny's own emperor, Vespasian was an enthusiastic restorer of aqueducts, flood defences and bridges.⁴⁷ The majority of Trajan's projects, too, were utilitarian in character.⁴⁸ Above all, it is the road-building schemes of both emperors which offer the most telling analogy to the taming of nature in the cause of *salus humana* effected by Hercules and, by extension, by Pliny himself in his literary travels. Epigraphic evidence boasts of the efforts made by both emperors to subjugate nature to human needs: a Trajanic road in Moesia Superior required cutting through mountain cliffs and the inserting of supports; elsewhere,

more than markers and involved a landscape change with human needs in mind (either the building of promontories to keep out Ocean's monsters, or breaking through a narrow strip of land to allow access: Diodorus Siculus 1.8.4–5; Pliny 3.4; Pomponius Mela 1.27).

⁴⁵ Beagon (1992) 84.

⁴⁶ 31.42; 36.104, 121. Bridges, roads and granaries were among his other projects. Pliny approves his old-fashioned values ('a man closer to rusticity than refinement', 35.26). Although a collector of art, he advocated its use for public display and adornment rather than private luxury (35.26): splendid decoration was a feature of his great public buildings, including the Pantheon (34.13, 34.62, 36.102, 36.38, 36.189).

⁴⁷ Levick (1999) 125, 138. ⁴⁸ Boatwright (2002) 268–70.

rockfalls are prevented, difficult ground overcome and substructures built to combat subsidence.⁴⁹ Vespasian's impressive tunnelling on a section of the Flaminian Way (the Furlo Pass), made an impression hundreds of years later on Montaigne⁵⁰ and remains today. Imperial motives were primarily military,⁵¹ but access and commerce were concomitants of pacification. Hercules, too, though primarily a conqueror, was also a patron of trade and a protector of travellers, a tradition upheld by the peoples along the ancient route from Italy to Gades known as the Heracleian Way, according to Ps.-Aristotle (*De Mirabilibus Auscultationibus* 85). Cult sites dedicated to the hero were to be found in cities and along highways throughout Italy, according to Dionysius Halicarnassus (*Roman Antiquities* 1.40.6), with the primary altar at Rome being situated in the Forum Boarium, an ancient commercial centre and terminus for important roads.⁵²

Successive Roman leaders thus created a network of roads over the known world, controlling and ordering nature. These roads were the lasting legacy of their civilising passage through untamed territory. They formed a network which was also a safety net, wrapping themselves around the universal empire and binding it into a unified and comprehensible whole. Although the routes constructed by Pliny through his literary embodiment of nature were not always straightforward,⁵³ he does not abandon his reader to directionless wanderings. In addition to material restructurings of nature in accordance with the principle of *humana salus*, Agrippa had, like Pliny, ordered nature in a metaphorical sense. In his case, this had taken the form of geographical commentaries, from which a map was later created for public display at Rome, 'setting the world before the gaze of the city' (3.17); a linear analogy to the *Natural History* itself.⁵⁴ Agrippa's commentaries were in turn a major source for Pliny's geographical books (3–6). These books offer a basic level of comprehension and orientation for the reader starting out on his global literary journey through nature, and Pliny takes up his role as guide and protector along the route: 'But now our mind . . . hastens to lead the thoughts of readers through the whole world as though by the hand' he says in 2.241,⁵⁵ before embarking on this gazetteer of the world. Again, in 8.44, his readers are said to be making a brief journey in his

⁴⁹ Smallwood (1967) no. 413; Boatwright (2002) 265–6.

⁵⁰ From his *Travel Journal*: Fossombrone, in Frame (2003) 1192. Cf. Aur. Victor, *De Caes.* 9.8, *Epit.* 9.9.

⁵¹ Levick (1999) 150–1; Boatwright (2002) 269.

⁵² Bradley (2005) 129–51. ⁵³ Cf. Murphy (2004) 30–40.

⁵⁴ Cassius Dio 55.8.4; Nicolet (1991) 95–122. See also above, pp. 84–5 on Cicero's appreciation of Varro's services to the power of knowledge.

⁵⁵ *mens . . . festinat legentium animos per totum orbem veluti manu ducere.*

care (*cura nostra breviter peregrinantes*) through the whole of nature. If the analogy were to be extended to the indices, they would perhaps be short cuts, although their functionality is questionable. Despite his digressions, the journey is ultimately completed, the reader is brought home safe and sound and nature's benediction for this achievement is sought, as we saw, in the closing lines. The analogy between roadways which tidy up nature in the cause of *salus humana* and the achievement of the writer who, by tidying and improving the roadways of utilitarian knowledge, expedites his readers' attainment of its benefits, is made explicit by Galen. The physician compares his improvement of the highway of medical knowledge by the revision and supplementation of its Hippocratic origins to the improvements wrought by Trajan to the roadways of the empire for the benefit of humanity.⁵⁶

So far in this section, we have seen how Pliny's text endorses the utilitarian restructuring of nature undertaken by some Roman leaders, including his own patron, Vespasian. In addition, the imperial roads which led to the penetration and control of nature have a literary counterpart in Pliny's authorial leadership as he penetrates nature and hacks a path through the wilderness to make nature comprehensible and thus useful to his readers: 'the path is not a well-trodden road for authors, nor is it one on which the mind is eager to wander' (preface 14). I finish by extending the metaphor of travel and (re)structuring to the actual composition of the *Natural History* itself. Pliny's working methods as described by his nephew appear rather unstructured. How did he make his labours coherent and comprehensible, ensuring that they would be of service to others?

⁵⁶ 'No-one before myself has covered all these things in order, although the road was first discovered by Hippocrates. For he was the first to write an account of the treatment of the matters I am about to discuss. However as pioneer he neither produced a blueprint which all were obliged to follow nor did he expound every point to perfection, but in some he omitted definitions, while many others he explained obscurely, due to his archaic brevity of diction. In addition, he offered only the briefest instructions on very complex conditions. In short, the road to healing seems to me to lie open, but requires care and hard work to bring it to perfection; just as today we see that some of the ancient roads in our lands are clogged with mud or partially blocked by stones or brambles, or climb too steeply, or drop too precipitously, or are infested with wild animals, or are impassable due to the size of the rivers, or are circuitous or difficult. Yet all the roads in Italy in this condition Trajan improved. In the parts that were marshy and swampy he spread layers of stones or elevated the roadbed with high fills; he cleared away the rough and thorny sections and built bridges over impassable points on the rivers; where the road was unduly long he constructed a short cut in another place; for example, if the road was difficult because of the steepness of the hill he deflected it through more accessible regions; if it was infested with wild animals or deserted he diverted its course, directing it through populated districts and smoothing the rough patches as well' (Galen, *Therap. Meth.* 1. 8, K, X. 632–3. Latter part of translation, on Trajan, from *ESAR* 5: 278–9 n.29).

As he traversed much of the empire in the imperial service, Pliny's notebooks accompanied him.⁵⁷ These *commentarii* were the raw material for his literary works; excerpts from his reading, probably with annotations.⁵⁸ The small writing and use of both sides of the paper highlighted as special features by his nephew were probably not motivated solely by economy but by the need to keep the notes as portable as possible. However, mobility was a characteristic of Pliny's working methods generally, as Pliny the Younger describes (*Ep.* 3.5). With the help of readers and secretaries, reading, writing and dictation were squeezed into the spaces between the daily official duties and colonised the periods of refreshment – eating, bathing, even sleep – during which the less dedicated might have given themselves up to rest and inactivity. Travel, where he was literally in motion, was carefully adapted to the pursuit of more facts and, if Pliny decided that conveyance by carriage or litter was the most practical solution, we should remember that what we would regard as sedentary and passive transportation was regarded as a form of gentle exercise in antiquity (28.53). Some of these practices were not unique,⁵⁹ but, whereas for others they were part of a smoothly ordered regime, his nephew's portrayal of Pliny's working methods suggests his studies were forced on top of, rather than coordinated smoothly into, an already busy schedule.⁶⁰

As he paced his untrodden paths of scholarship in a hectic working environment, how did Pliny manage to tame and order what he found? Quintilian is helpful here. While warning that an amanuensis can be a stumbling block to ordered thinking and that being in the open air can be a distraction, he also insists that aspiring writers must learn to overcome distraction: 'in a crowd, on a journey, even at dinner, let our thoughts create their own private space' (*Institutio oratoria* 10.3.28–30). He is not suggesting that polished compositions can be turned out in such circumstances. Rather, he is thinking of 'little jottings to put in our notebooks' (*particulas quas ceris mandemus*, 10.3.30). In other words, these are initial thoughts. The contrast between disordered *particulae* and ordered composition is emphasised by

⁵⁷ The natural conclusion to be drawn from the offer made by another imperial official, Larcus Licinus, to purchase them for the huge sum of 400,000 sesterces when he was on a tour of duty in Spain, perhaps in 72–4 AD: Syme (1969) 228–35.

⁵⁸ How these were produced and organised has been discussed in detail in Naas (2002) 117–35.

⁵⁹ Sen., *Ep.* 15.6; Pliny, *Ep.* 3.1.2; Starr (1991) 337–43; Johnson (2000) 593–627.

⁶⁰ Such epistolary portraits can to a certain extent be artificial constructs, and this development of Pliny the Elder's own self-assessment in his preface (two Plinys for the price of one, preface 18; above, p. 88) is, amongst other things, a comment on Pliny the Younger's own studiousness (*Ep.* 3.5.19); but the skeletal biographical information here and in Suetonius (*De Illust.*) does seem to endorse a general picture of unrelenting busyness. See Syme (1969) 201–36; Beagon (1992) 1–4.

Vitruvius, who claims that his predecessors had not sufficiently tamed and organised their subject matter, so that their compositions were disordered: 'not set in due order but inchoate, like atoms' (*non ordinatu sed incepta, uti particulas, errabundos*, 4. preface 1). For the serious business of composition, Quintilian advocated privacy and silence, especially at night, when there were fewer visual distractions (*Institutio oratoria* 10.3.25–7). If we look again at Pliny's working practices, we see that they are likely to have been consistent with Quintilian's advice: the nocturnal studies of the preface were surely devoted to the ordering of the miscellaneous jottings of the day.

It was, then, the gathering of initial ideas and inspirations which punctuated the busy daytime schedule. The free wandering of the mind might accompany the physical perambulations of the body.⁶¹ The motif of the polymath as an intellect in motion, both metaphorically and literally, was an enduring one. There are fascinating replications in the portrayals of scholars of later eras, courtesy of John Aubrey in his *Lives* of Francis Bacon and Thomas Hobbes. The former would walk in his grounds 'much meditating', while an attendant accompanied him 'with pen and inke horne to sett down his present notions'.⁶² Hobbes was more self-reliant, since he had 'on the head of his staffe a pen and inke horne [and] carried always a note-book in his pocket and as soon as a thought darted he presently entered it into his book'. He even carried a miniature drawing-board for geometrical thoughts.⁶³ Both, however, returned to their studies to give order and coherence to the ideas captured in their notebooks.

***Molem illam Historiae Naturalis*: the encyclopaedist's cultural burden**

In the fourteenth century, Richard de Bury described Pliny's great labour as *molem illam Historiae Naturalis* (*Philobiblon* 10.160). I close this analysis of the nature of Pliny's encyclopaedic mission with a consideration of his work as a burden or *moles*. Like the other images we have examined, this one, too, appears as a readily recognisable metaphor of political service. The statesmen of Cicero's era 'bear the republic on their necks', in addition to having many dangers in their paths and having to undergo many labours: 'But those who more than others carry upon their shoulders the burden of

⁶¹ Reading or dictating while walking was a feature of Seneca and the younger Pliny's daily routines (Sen., *Ep.* 15.6; Pliny, *Ep.* 9.36.3). O'Sullivan (2006) 133–52 notes various uses of the metaphorical interaction between physical and intellectual activity.

⁶² Clark (1898) I, 83. ⁶³ Clark (1898) I, 334–5, 350–5.

such duties and the public administration, are always considered as leaders of the “Optimates”, as counsellors and saviours of the state. This class of men, I confess . . . have to undertake and endure great labours’.⁶⁴ Once again, the motif carries Herculean echoes: the burdensome nature of the hero’s labours was epitomised by his temporary bearing of the celestial globe for the Titan Atlas. Imperial analogies are even closer to the Herculean image, since they can, conveniently, encompass the idea of sole responsibility for a burden of cosmic proportions. Thus Horace (*Epistulae* 2.1.1), promises not to waste too much of Augustus’ precious time, ‘since you alone carry the weight of so many and such important tasks’.⁶⁵

The transference of the metaphor to the intellectual sphere is, however, more complex. Pliny himself does not use the term to describe the *Natural History*, though he comes close with his emphasis on the difficulty and size of his task (preface 14–16), as does Diodorus when stressing the toil of the writer of a universal history (1.1.1–3; 3.4). Such an application would be in line with an increasing tendency to give Hercules himself intellectual attributes. This development was already inherent in his adoption as a philosophical icon, but it is noticeable that Diodorus Siculus, for instance, is frequently at pains to suggest that Hercules’ traditional labours were effected by brains as well as brawn.⁶⁶ One Hellenistic rationalisation of the Atlas myth reinterpreted the latter as the inventor of astronomy and Hercules as his most distinguished pupil, making them in effect natural philosophers, and their burden an intellectual one, that of knowledge of the heavens.⁶⁷

However, as a metaphor of large-scale intellectual endeavour, the Atlantean/Herculean *moles* was in certain respects inappropriate. The mind itself was often perceived as being able to break free of terrestrial constraints and wander unimpeded through the universe, rather than remaining stationary and bowed under its weight; an image exploited by Lucretius, Ovid and, later and perhaps most memorably, by Sir Thomas Browne. The mind of Lucretius’ hero Epicurus, far from being pinned down by the heavens (*nec . . . compressit caelum*), traversed the universe freely in his quest to lift the burden of superstitious fear from humanity (*De rerum natura* 1.69–79). The cosmic journey of Ovid’s Pythagoras (*Metamorphoses* 15.147–50)

⁶⁴ *Qui autem praecipue suis cervicibus tanta munia atque rem publicam sustinent, hi semper habitati sunt optimatum principes, auctores et conservatores civitatis. huic hominum generi fateor . . . magnos esse experiundos et subeundos labores* (Cicero, *Pro Sestio* 138).

⁶⁵ *cum tot sustineas et tanta negotia solus.*

⁶⁶ ἐπινοία, ingenuity, was also in play: Diodorus 4.11.6, 13.1, 13.2, 13.3. Philosophical Hercules: Galinsky (1972) 101–25; *ratio*: Virgil *Aen* 8.298–300; Hardie 1986: 216–7.

⁶⁷ Cf. Herodorus *FGrH* 31, F13; Cicero, *Tusc.* 5.3.8. See Galinsky (1972) 193–5; Hardie (1986) 58.

echoes Lucretius, but with a significant addition: the philosopher takes his stand on the shoulders of Atlas, far above a world weighed down by mortal anxieties. Many centuries later, Sir Thomas Browne exploited to an even greater extent the implications of the Ovidian image, triumphantly declaring that he was 'above Atlas his shoulders' (*Religio medici* 2.11), his mind able to soar so high that the normal relationship of the human microcosm to the macrocosm was reversed and the latter becomes a hand-held globe (by now normally a terrestrial globe in Atlantean iconography) with which the former can play at will.⁶⁸

Applied to the products of the mind, however, especially those of an encyclopaedic nature, the metaphor of *moles* was highly appropriate. True, this was in some respects a paradoxical concept. The free and unconquerable mind celebrated so ebulliently by Browne was forced to labour in service to others. But this in itself was the paradox of Hercules and the rulers who emulated him: the good ruler was a servant to his people; the ideal republican statesman was the man who served his country well.⁶⁹ Burdensome undertakings for the common good were a matter of pride. That Virgil's Aeneas, whose multiple associations with the Roman Hercules have been too often rehearsed to need lengthy exposition here,⁷⁰ incessantly toiled and struggled under the awesome burden of his country's destiny was to his credit. It displayed, besides his much vaunted sense of duty (*pietas*), other valued qualities such as endurance (*patientia*). The virtues of a Roman hero were often no more flashy than the humble products of nature exhibited in Pliny's heroic enterprise. Both, however, were vital to the welfare of the community they served. The metaphor of the Herculean *moles* was as appropriate to Pliny, whose work encompassed the entire world, as it was to Aeneas, who shouldered the destiny of Rome's world-embracing empire.

If we move forward once more to the fourteenth century, the metaphor gains an additional resonance. When referring to Pliny's work as *moles*,

⁶⁸ 'The world that I regard is my selfe, it is the Microcosme of mine owne frame, that I cast mine eye on; for the other, I use it but like my Globe, and turne it round sometimes for my Recreation. Men that look upon my outside, perusing onely my condition, and fortunes, do erre in my altitude; for I am above Atlas his shoulders. The earth is a point not onely in respect of the heavens above us, but of that heavenly and celestiall part within us: that masse of flesh that circumscribes me, limits not my mind: that surface that tells the heavens it hath an end, cannot perswade me I have any; I take my circle to be above three hundred and sixty, though the number of the Arke do measure my body, it comprehendeth not my minde: whilst I study to finde how I am a Microcosme or little world, I finde my selfe something more than the great' (Sir Thomas Browne, *Religio Medici* 2.11).

⁶⁹ See above, pp. 89–91.

⁷⁰ Galinsky (1972) 132–5; Hardie (1986) 110–18; 213–8; 273–4 and refs. in n. 21 above.

Richard de Bury was considering the role played by a number of the larger-scale works of antiquity as repositories of the accumulated knowledge of the past: ‘many lawyers laid the foundations of the *Pandects* (Justinian’s *Digest*) many physicians those of the *Tegni* (Galen’s Τέχνη Ἰατρική) and it was by this means that Avicenna produced his *Canon* and Pliny *molem illam Historiae Naturalis*.⁷¹ For the humanist scholar, the burden Pliny assumes is nothing less than the accumulated weight of the classical heritage. The recognition of such works’ multiple sources might at first sight bring us closer to their affiliation to the modern encyclopaedia, but de Bury understood tradition as a living entity ceaselessly refashioned and replenished by the creativity of later writers, as well as their desire to preserve. The arts and sciences have been subjected to a refining process in the furnaces of generations of scholars (158), while the fact that Virgil ‘ploughed with the heifer of Theocritus, Lucretius and Homer’ ensured rather than detracted from his primacy among Latin poets.⁷² Primacy was not awarded to the great Roman leader merely by virtue of the size of his army, but by the creative skill with which he shaped and deployed it; so too with those who, like Pliny, commanded vast libraries of sources in a literary context.

De Bury, then, confirms the hopes articulated by Vitruvius, in the passage discussed above, that large-scale encyclopaedic works will benefit future generations. About 150 years after the completion of the *Philobiblon*, Peter Martyr reiterated the importance of transmitting to posterity the mass of knowledge pertaining to the new world, as Pliny had done for the old, enumerating regions, peoples, products and ‘the nature of things’ (*De orbe novo* 3.9.15). Both later writers testify to the success of Pliny’s labours in ensuring a future for Rome’s cultural glory as Aeneas had done for her political renown. But it is not necessary to look into the mythical past and Rome’s original foundation to construct a resonant parallel for his burden. At the same time as he was shouldering the literary construction of divine and all-embracing nature, his imperial master was shouldering the reconstruction of the Capitol, the embodiment of Rome’s eternal and divinely ordained *imperium*. When rebuilding began in 70, Vespasian took a personal lead and was the first to carry off a load of rubble. Suetonius’ language is significant: ‘He began the restoration of the Capitol in person, was the *first* to lend a hand in clearing away the debris, and carried some

⁷¹ *Sic multi iurisperiti condidere Pandectam, sic medici multi Tegni, sic Avicenna Canonem, sic Plinius molem illam Historiae Naturalis* (*Philobiblon* 10.160).

⁷² *Quid fecisset Virgilius, Latinorum poeta praecipuus, si Theocritum, Lucretium et Homerum minime spoliasset et in eorum vitula non arasset?* (162).

of it off *on his own shoulders*' (my italics).⁷³ The labourers and craftsmen are ignored; the responsibility and the achievement are Vespasian's alone. Suetonius' wording (*ipse . . . primus*) is in keeping with the language of achievement examined earlier, including Pliny's triumphant assertion at the end of the *Natural History*. Moreover, his responsibility extends to an initially literal, if ultimately symbolic, shouldering of the burden and toil of construction in recognisably Herculean phraseology: *suo collo . . . extulit*. To this was added a further undertaking to replace the 3,000 bronze tablets recording official decrees which had also been destroyed with the temple, 'the most precious and ancient records of empire' according to Suetonius; a search which would, if necessary, traverse the empire.⁷⁴

Aeneas had preserved the past, symbolised by his household gods, in the very foundation of Rome's future. Vespasian took upon himself the burden of collecting the documents necessary to repair the written record of his country's history, and re-founded a potent symbol of its continuity. Pliny collected and ordered the material from his 2,000 sources and shouldered *molem illam Historiae Naturalis*. In so doing, he preserved his country's intellectual heritage and created a solid foundation for its appreciation centuries later.

⁷³ *Ipse restitutionem Capitoli adgressus ruderibus purgandis manus primus admovit ac suo collo quaedam extulit* (Suetonius, *Vesp.* 8.5; cf. Cassius Dio 65.10.2). The symbolism of the Capitol was not lost on Pliny, who notes with satisfaction Sulla's lament that he would not live to see the dedication of his own restoration of the temple after it was destroyed in 83 BC (cf. Tacitus *Hist.* 3.72.7); a fitting penalty for the deliberate murder of fellow-citizens: see above, p. 94.

⁷⁴ 'He undertook to restore the three thousand bronze tablets which were destroyed with the temple, making a thorough search for copies: priceless and most ancient records of the empire' (*aerearumque tabularum tria milia, quae simul conflagraverant, restituenda suscepit undique investigatis exemplaribus: instrumentum imperii pulcherrimum ac vetustissimum*). Levick (1999) 126, and nn. 7–8, suggests that the restoration of the documents was actually undertaken by the senatorial commission voted in early 70 to make good war damage and generally overhaul public records (Tac., *Hist.* 4.40).

5 | Encyclopaedias of virtue?

Collections of sayings and stories about wise men in Greek

TERESA MORGAN

Introduction

To a historian of education, the word ‘encyclopaedia’ has an obvious resonance. *Enkyklios paideia* was a widely used term for the cycle or curriculum of basic education which developed out of classical Athenian practices in the Macedonian kingdoms of the Hellenistic world, impressed the Romans and was transplanted by them throughout their empire.¹ Accessible to a small minority of Greek and Roman children, it prepared a still smaller minority for higher studies which would equip them to distinguish themselves in the many arenas of Greco-Roman public and intellectual life. *Enkyklios paideia* was an important institution: a passport to civilised society, a preparation for public service, a place where Greek and Roman culture were debated and defined, transmuted and transmitted. It was never, though, described as ‘encyclopaedic’ in a modern sense.

One may conveniently trace the modulation of the Greek phrase into the modern word in the columns of the Oxford English Dictionary. An encyclopaedia is ‘the circle of learning; a general course of instruction’ (a Renaissance borrowing from Greek which appears in English in the early sixteenth century); ‘a literary work containing extensive information on all branches of knowledge’ (in book titles from the seventeenth century); and ‘an elaborate and exhaustive repertory of information on all the branches of some particular art or department of knowledge’ (a meaning first attested in the early nineteenth century).² In the twenty-first century, we still think of encyclopaedias in broadly nineteenth-century terms: as comprehensive, systematic and authoritative compendia, presenting what society (or some influential group within it) regards as significant information on one or more subjects in a conveniently usable form.

On this definition, it is not obvious that the subjects of this essay – collections of sayings (*gnomai*) and stories (*chreiai*) about wise men in

¹ For definitions see e.g. Philo, *De cong.* 11–18, 74–6, 142, 148–50; Quint. 1.10.1; Morgan (1998) 33–9 and *passim*; cf. above, [chapter 2](#), pp. 46–7.

² The dictionary notes that in the latter two senses, encyclopaedias are often, though not always, alphabetically arranged.

Greek – should be called encyclopaedic. Nevertheless, in what follows I shall argue that the gap between such collections and modern encyclopaedias is not as wide as it might appear, and that these collections do have some claim to be called encyclopaedic in a sense which lies somewhere between ancient and modern meanings of encyclopaedism. Moreover, I shall suggest that to call these collections encyclopaedic usefully captures something of their cultural centrality and importance, which is too often overlooked.

Ancient wisdom collections

Chreiai are brief stories of the sayings or actions of a *sophos*, a wise man. ('Thales, the wisest of wise men, said, "If you are lazy when you are rich, you will become poor."')³ *Gnomai* are moralistic sayings by wise men, which may be as short as two words ('Control anger')⁴ or as long as a complex sentence ('Look in the mirror: if you look beautiful, your conduct should be the same; if ugly, you must correct your physical deficiency by doing what is beautiful and good').⁵

Most of the men who pronounce *gnomai*, and are the subjects of *chreiai*, lived in archaic or classical Greece: they included the so-called seven sages of archaic Greece, (some of whom were scientists and philosophers and others politicians),⁶ the semi-mythical fabulist Aesop, the guru-figure Pythagoras, and the philosophers Democritus, Anaxarchus, Socrates, Plato, Aristotle, Isocrates and Diogenes the Cynic. After the late fourth century, it became harder to be honoured as a *sophos*. Those who are, are often founders or early luminaries of Hellenistic philosophical schools: Theophrastus, Zeno, Crates and Epicurus.⁷ Occasionally, a group of exotic foreigners is included, like the Indian philosophers, sometimes called gymnosophists, who were supposed to have been consulted by Alexander the Great.⁸ By the time of the Roman empire, almost no new Greek *sophoi* were being identified; one

³ Boyaval (1975), cf. Boyaval (1974); Gallo (1980) 325–40. Occasionally *chreiai* are extended to look more like fables: e.g. Jouguet and Lefebvre (1904).

⁴ E.g. Diog. Laert. 1.70 (of Chilon); Stob. 3.1.172; Hasluck (1907); Schenkl (1889).

⁵ Attributed to Bias, Stob. 3.1.172. ⁶ Below, pp. 14–16.

⁷ Sedley (1989) discusses other Hellenistic philosophers who seem to be similarly revered, at least by their own followers.

⁸ Ps.-Callis. 3.6. Greek culture has a long history of identifying certain groups of foreigners (Indians, Chaldeans, Egyptians, Ethiopians, Scythians) as wise, but few of these generate wisdom collections. One possible explanation is suggested by the argument of Harris-McCoy in chapter 7: perhaps wisdom collections aimed to disseminate distinguishably, or arguably, Greek values.

exception is the (possibly fictional) second-century Cynic Secundus, ‘the silent philosopher’.⁹

It is unclear how a man acquired the title *sophos*. (Women, who as a sex lacked cultural authority, might study philosophy but were not revered as sages.)¹⁰ Of those who did, some are more certainly historical than others, and they were famous for diverse activities. What seems clear is that being *sophos* meant being represented in a certain way: as a source of wisdom and moral guidance, typically transmitted via stories and sayings which were widely anthologised, inscribed, quoted and taught. Some *sophoi* also left extensive and sophisticated philosophical and scientific writings, but their theories are rarely the subject matter of *chreiai* and *gnomai* – indeed, the disjunction between the known theories of wise men and the sayings and stories attached to their names can be striking.¹¹ Normally, the content of *chreiai* and *gnomai* is better categorised as popular morality: ideas about the gods, human life and good and bad human behaviour, which are shared by other wisdom genres such as proverbs and fables, and which are very widely attested across the Greek and Roman worlds and up and down the social scale.¹²

Gnomai and *chreiai* are in principle distinct genres, but in practice they continually interbreed, both with each other and with other genres. This mutable quality is typical of popular wisdom, and is shared by fables and proverbs.¹³ The following *chreia*, for instance, is told by Diogenes Laertius of Bias of Priene, one of the archaic seven sages: ‘On being asked what is sweet to men, he said, “Hope.”’ The same question and answer appear anonymously as part of a collection of gnomic riddles in a school text from

⁹ The subject of an anonymous life which was apparently used in schools (*P. Ross. Georg.* 1.17; see Morgan (2007) 282).

¹⁰ E.g. Diog. Laert. 3.46, 4.2, 6.96, 8.42, and later, Hypatia of Alexandria.

¹¹ Stories about Plato and Aristotle, for instance, are often about their lives and feuds rather than their theories; this seems to be increasingly true in later material, material in translation and material from educational contexts. See the discussion of Curnis (2004). Democritus is particularly often credited with *chreiai* and *gnomai* more generally moralising than specific to his doctrines: Stewart (1958) suggests that this is because he was respected and transmitted by the Cynics, who were particularly fond of moralistic *chreiai*. In Arabic material, well-known *dicta* are often attached to the wrong philosopher (e.g. many of Diogenes’ sayings are attributed to Socrates) or characters like Pythagoras with very distinctive views are given generic wisdom sayings like ‘abandon anger and strife’, ‘avoid over-eating’, ‘do not sleep too much’ (Gutas (2002) 67). Arabic tradition reduces the list of Greek wise men to Pythagoras, Plato, Socrates and Aristotle with lesser roles for Isocrates, Democritus, Diogenes and Menander.

¹² On material identifiable as ‘popular morality’ and the range of its subject matter see Morgan (2007) 3–8 and 23–190.

¹³ Morgan (2007) 7. Funghi (2004c) discusses ‘interbreeding’ specifically between *gnomai* and *chreiai* of wise men.

Roman Egypt.¹⁴ Solon's famous saying, 'I grow old always learning many things' circulated as a *gnomê*, but also became detached from his name and circulated as a proverb.¹⁵ Both Bion and Antisthenes are credited with the advice that if you marry an ugly woman you will be unhappy, while if you marry a beautiful one, you will be jealous. The same dictum appears in anonymous collections of *gnomai* on papyrus.¹⁶

Gnomai and *chreiai* of wise men survive individually, embedded in other literature or inscribed on stone,¹⁷ and in collections, on stone, in papyri and in manuscripts. Collections may consist of one genre or the other, or a mixture of both. Whether carved or penned, collections are usually simply arranged as a list of sayings or stories without introduction or commentary, under a title such as 'Sayings of the seven sages'. Collections of sayings, in particular, are often set out with one saying to a line, but sometimes sayings or stories follow one another, with or without punctuation, so that they look like passages of connected prose.¹⁸

Some collections are embedded in more elaborate works – biographies like those of Diogenes Laertius, Philostratus' *Life of Apollonius* or the *Life of Aesop*, or larger wisdom collections like that of Stobaeus.¹⁹ They may be presented in question-and-answer form, like the *Apophthegmata of the Nine Wise Men to Alexander the Macedonian*.²⁰ They may develop into literary conceits like the *Symposium of the Seven Sages* by Plutarch and the *Play of the Seven Sages* of Ausonius.²¹ Collections survive on papyri from Hellenistic and Roman Egypt, copied in literary hands, informal scholars' hands or by teachers and schoolchildren.²² Many more come to us through Byzantine

¹⁴ Diog. Laert. 1.87; Kenyon (1909) col. 3.3, 14; cf. *P. Oxy.* 3006.26. ¹⁵ Fr. 18; Zen. 3.4.

¹⁶ Diog. Laert. 4.48, 6.3; Reitzenstein (1900); cf. Kenyon (1909) col. 3.8. The desirability of marrying at one's own level also appears both among *chreiai* and in gnomic collections.

¹⁷ On inscribed versions see Robert (1965); Funghi (2004c); Maltomini (2004); Oikonomides (1987).

¹⁸ So the earliest surviving Byzantine and early medieval manuscripts, the *Gnomai Sophon* edited by Schenkl (1889), *Apophthegmata Philosophorum*, *Corpus Parisinum*, *Gnomologium Byzantinum* and *Gnomologium Vaticanum*. The nineteenth century saw a number of collections and studies of these manuscripts: Boissonade (1829–33); Elter (1893–7), (1900–4); Schenkl (1886); Wachsmuth (1882). More recent editions and commentaries include Beck (1971); Bühler (1989); Tziatzi-Papagianni (1994), (1997); Führer (1997); Snell (1938).

¹⁹ On Stobaeus' sources, Demetrius and Sosiades, and the complexity of the transmission of the sayings of the seven wise men in general, see Bühler (1989); Funghi (2004b); Tziatzi-Papagianni (1994).

²⁰ The 'gymnosophists', above, n. 8.

²¹ Ed. L. Spahlinger in Althoff and Zeller (2006) 161–89.

²² *Chreiai* and *gnomai* on papyrus: *P. Oxy.* 3685, 4099, Pintaudi and Sijpesteijn (1989) nos. 5–6; *Papyri Societatis Archaeologicae Atheniensis* 2782; *Papiri greci e latini* 9.1093 (seven sages), 7.848; *Griechische Ostraka aus Aegypten und Nubien* 2.1226 (Aesop); *Papiri della Università degli Studi di Milano* 6.263 (Demosthenes); *Papyri russischer und georgischer Sammlungen* 1.17

manuscripts in Greek, and late antique manuscripts in Syriac and Arabic.²³ Overall, the number of survivals is enormous – far greater than those of all but the most popular literary works – and testifies to the broad and sustained popularity of the material.

Wisdom collections of all kinds favour what one might (paradoxically) call a miscellaneous style of arrangement. Sometimes there is little indication of order at all.²⁴ Sometimes collections are arranged alphabetically by the first letter of the first word of the saying or story. Many collections are thematically arranged, and one can follow to some degree the logic of their sequence of topics.²⁵ Sometimes thematic clusters are detectable within collections which are not themed consistently. At their most orderly, however, our collections do not aspire to anything like the level of organisation of a modern encyclopaedia. They do not even run to lists of contents (as was not uncommon in miscellanies from the Roman world),²⁶ and they never develop indices. The way we characteristically use an encyclopaedia – thinking of a topic we want to read about and looking it up in the index – is impossible in these collections. Not only is there no way to look up any subject; alphabetising sayings and stories by their first letter does not reliably capture their subject matter, so one cannot even scroll through the collection to, for instance, *e* for *elpis*, because sayings about hope begin variously with *erôtêtheis* and *ti*.²⁷

This lack of orderly arrangement is only one reason why it is hard to think of wisdom collections as being much like modern encyclopaedias. We can hardly guess what a comprehensive collection of Greek wisdom material would look like, but we can say with certainty that no surviving collection can be called comprehensive. Many contain overlapping material, but most preserve at least some sayings and stories which are not collected anywhere else. They also disagree as to who counts as a *sophos*. There were

(Secundus); *Sammelbuch griechischer Urkunden aus Ägypten* 1.5730, *Les Papyrus Bouriant* 1; *Mitteilungen aus der Papyrussammlung der österreichischen Nationalbibliothek in Wien* 3.32; *Mons Claudianus. Ostraca graeca et latina*. 2.413 (Diogenes). Morgan (2007) 84–121 discusses gnomologies; Morgan (1998) 279–81 lists gnomologies in school-text papyri.

²³ Above, n. 18; on Arabic versions, see d’Ancona (2004); Gutas (2002); Strohmaier (1973). Gutas (2002) 475–518 edits some two hundred *chreiai* of Diogenes which no longer survive in Greek. On Syriac versions see P. Bettolo (2004); Brock (2003); Gildemeister (1870).

²⁴ On miscellaneity and its ordering see also Oikonomopoulou in chapter 6.

²⁵ Below, pp. 14–16.

²⁶ E.g. Pliny the Elder, Aulus Gellius and Stobaeus provided lists of contents for their works; Valerius Maximus either provided one or an early copyist did (Morgan (2007) 264).

²⁷ Diog. Laert. 1.69, 5.18; Kenyon (1909) col. 3.3, 14.

traditionally seven *sophoi* of archaic Greece, but lists varied and surviving versions include twenty-one different names.²⁸ Outside that group, there is even less agreement about who qualifies as wise. Most of our collections, moreover, are likely to be personal selections, and none makes any claim to universal authority.

On system

On what grounds, then, can one call these collections encyclopaedic?

The comparison I drew above between ancient miscellanies and modern encyclopaedias was really a comparison between ancient practices and modern ideals. If we compare ancient with modern practices, we find them rather closer together. No modern encyclopaedia is as comprehensive as it claims to be, not least because what is believed to be known is always changing, and its definition and organisation are always contestable. All encyclopaedias are digests of selected material, presented by one person or group for specific purposes. There is never only one possible arrangement of their contents. They compete for authority, which they define in different ways, and authority is conferred on them by users who may use the same or different collections for diverse purposes. (If you are researching Greek myth, you may turn first to Larousse; if you are doing the crossword, you may prefer Chambers; if school homework, Wikipedia. Specialists can call on anything from *The Encyclopaedia of Russian Criminal Tattoos*²⁹ to *A Byzantine Encyclopaedia of Horse Medicine*.³⁰ There is even, for those who despair of encyclopaedic perfection, an *A to Z of Almost Everything*).³¹

To that extent, the limited authority and comprehensiveness of ancient wisdom collections are not quite such a handicap as at first appears. Then again, ancient wisdom collections are in some ways more systematic, more comprehensive and more authoritative than we might assume. In particular, I suggest, they aim to give readers or listeners a thorough grounding in what

²⁸ According to Diogenes Laertius (1.40) Thales, Bias, Pittacus and Solon were universally included. He lists a further nine as commonly included (1.13); cf. Clem. Alex, *Strom.* 1.59. Demetrius of Phalerum, to whom the first collections or lists of things are often attributed, is said (Stob. 3.1.172) to have made the first collection of sayings of the seven sages, and (Diog. Laert. 1.22) to be the first surviving author to refer to the group as such (though he was allegedly citing a sixth-century source).

²⁹ Ed. Sergey Vasiliev (Goettingen, 2004).

³⁰ Ed. Anne McCabe (Oxford, 2007). ³¹ Ed. Trevor Montague (London, 2007).

is good and bad, just and unjust behaviour: to convey all the essentials, along with some of the options, for virtue.

The miscellaneous nature of both the contents and organisation of popular wisdom in general, and of collections in particular, was already a matter for discussion in antiquity. In Letter 94, Seneca the Younger cites the Stoic Ariston as complaining that *sententiae*, by which he means (from the examples he quotes) both proverbs and gnomic quotations, and which he says are taught in every school and at every grandmother's knee, are too specific and not systematic enough to make anyone a good man.³² Seneca disagrees. Although *sententiae* present themselves to us unsystematically, he explains, they can be sorted into systematic groups (whether he means on the page or in the mind is unclear).³³ They may look frustratingly numerous, fissile and incoherent, but this is a mistaken impression. When one looks closely at them, they repeat themselves time and again, and their main themes recur with only minor variations.³⁴ What is more, between them they cover the essentials of morality. Their miscellaneous presentation even has advantages: when similar *sententiae* crop up repeatedly and unexpectedly in a text or in everyday life, they refresh our memories, concentrate our minds and remind us of what we already know. Since no-one's memory or ethical practice is perfect, this is very useful.³⁵

Sententiae may be presented in many ways, says Seneca: woven into songs, for instance, or drawn together into prose collections like the *Sayings of Cato* and the oracular pronouncements of the seven sages.³⁶ All forms of presentation are equally effective, and what is more, to encounter wise men, through their sayings, in the course of one's education is itself pleasing and helpful: it adds to the impact of the material that it is associated with the names of famous philosophers and teachers.³⁷

Many wisdom collections seem to work exactly as Seneca describes. Although they include many separate *gnomai* or *chreiai*, the same topics recur, with minor variations applicable to different contexts. As one reads through, one's memory is jogged and the importance of certain subjects is reinforced by repetition. In a Delphic inscription of about 300 BCE from Kermasti, for instance, we find, 'Help your friends', followed a little later by, 'Love friendship . . . Be well disposed towards your friends. Defend yourself against your enemies . . . Be grateful to' [or 'do a favour for'] 'a friend.'³⁸

³² 94.2–3, 8–9. ³³ 94.21. ³⁴ 94.35.

³⁵ 94.21, 25. Seneca adds that *sententiae* are so vivid and commonsensical that they go straight to our emotions and arouse us to do good (29). In this and the following letter, Seneca argues that ideally we should learn both *sententiae* and high philosophy (94.45–6, 95.13–40).

³⁶ 94.27–8. ³⁷ 94.40. ³⁸ Hasluck (1907).

Friendship is established as an important quality, which has to be cultivated in different ways and which implies certain other behaviours towards non-friends. A fragmentary papyrus collection of anonymous *gnomai* (all beginning with the letter 'a') offers us periodic variations on a different theme: 'Many things hurt mortals . . . [it is necessary] to bear what happens to men nobly . . . being mortal, you cannot guard against divine hostility . . . remember always that you are a man'.³⁹ Human life, we infer, is a precious but precarious thing, continually at the mercy of divine forces, but since there is nothing we can do about it, we must bear our condition stoically. Not only are these various *gnomai* not incompatible: taken cumulatively, they make rather a coherent if complex package. On the other hand, if we prefer to dip in and out of the papyrus, they also make sense individually. As a system of presentation, this may not appeal strongly to modern tastes, but it was recognised and defended as effective in antiquity.⁴⁰

As I have indicated, however, wisdom collections do not always rely on the apparently random recurrence of different subjects to build up an effect. Many are at least partially organised. A common preference is for interspersing thematic clusters of material, some of which may have an internal sequence of their own, with passages of narrative or unthemed material. Diogenes Laertius is very fond of this form of organisation, and his *Life of Thales*, for instance, begins with *dicta* about the universe, space and time, the gods and necessity, and continues with how human beings should live, encompassing sayings on adultery, adversity, happiness, friendship and more.⁴¹ In his *Life of Cleobulus*, *dicta* about the household and family occur in a cluster, while in the *Life of Anacharsis*, all Anacharsis' sayings about self-indulgence in wine, oil or food, are grouped together. It is common in later manuscripts of the sayings of the seven sages, too, to cluster *dicta* under themes like feasts and drinking, self-control and speech, and in manuscripts and papyri of all kinds it is extremely common for two *dicta* on the same subject to occur together.

Collections do not tell us why they order sayings or stories as they do, but that there is order, and even progression of thought, is clear. In Diogenes' *Life of Thales*, the progression is cosmogonic, from what was first created to the nature of the gods and human beings. The *Life of Secundus* prefers a cosmological progression, beginning with the nature of the universe, the ocean, the divine, daylight, sun, moon and earth, and then moving on to man, woman, and various aspects of human life, ending with old age,

³⁹ P. Oxy. 3006.2, 6, 7, 17.

⁴⁰ And in fact, up to the nineteenth century: Morgan (2007) 257–8, 260–1.

⁴¹ Diog. Laert. 1.35–6.

sleep and death.⁴² An inscribed collection of Delphic maxims from Bactria includes a group of five which follow the ages of man: ‘Be well-behaved as a boy, self-disciplined as a youth, just in middle age, prudent in old age, pain-free at death.’⁴³

In other collections, it seems possible that the order of sayings reflects an order of ethical priorities, beginning with piety to the gods – a common opening subject in these lists.⁴⁴ Aesop’s introduction to a cluster of *gnomai* which punctuates his anonymous *Life* gives some support to this suggestion: ‘Helios, my son, listen to my words . . . First, revere the god as is right. Honour your king . . . honour your teacher like your parents.’⁴⁵ There are also traces of a standardised order in the *dicta* particularly of the seven sages across different collections. Many collections begin, ‘Know yourself. ‘Honour the gods – respect your parents’, and, ‘Honour the gods – respect the good’, are also common pairs. Those who read many such collections must have got used to encountering certain *dicta* in a certain order.⁴⁶

Comprehensiveness

I have argued elsewhere that by analysing Greek and Latin proverbs, fables, *gnomai* and *chreiai*, we can identify a ‘core’ set of Greco-Roman popular ethical ideas.⁴⁷ In this set, human beings are encouraged to honour the gods, who are generally regarded as benign, helpful and sponsors of such vital social goods as justice and good faith. On the other hand, we are advised to fear fate and fortune and to be rather pessimistic about human physical and moral fragility. Strife is regarded as endemic in human society, and is only imperfectly mitigated by such qualities as justice, trust, friendship, honesty, helpfulness, courage and intelligence.⁴⁸ The setting of much popular morality is the world of public life and government, which seems to be seen as particularly ethically challenging, and a dominant preoccupation is relations between the rich and powerful and the poor and vulnerable.⁴⁹

⁴² Not only wisdom collections favoured this organisation: Pliny’s *Natural History*, for instance, follows it too. So does e.g. the question and answer section within Plutarch’s *Symposium of the Seven Sages*, *Mor.* 153c–d.

⁴³ Robert (1965): 421–5. ⁴⁴ E.g. Oikonomides (1980); Stob. 3.1.172, 3. ⁴⁵ *Vit. Aes.* 109.

⁴⁶ This assumes that miscellaneous collections were commonly read through from beginning to end in antiquity, rather than dipped in and out of, as we might think more normal. I have defended this view at length in Morgan (2007) 257–73.

⁴⁷ Morgan (2007) 160–84. Zeller in Althoff and Zeller (2006) 107–58, which appeared while *Popular Morality* was in press, also argues for the sayings of wise men as folk ethics, and relates them to other genres of popular morality (e.g. Menander *sententiae*) and to high philosophy.

⁴⁸ Althoff and Zeller (2006) 161–9. ⁴⁹ Morgan (2007) 23–190.

‘Core’ values are those which in ethical material occur most frequently, and generate the highest level of agreement. Around the core is scattered a wider range of ‘peripheral’ values, which are presented as either useful but less important, or important but more problematic. Hope is an example of a virtue which is useful but not as important as friendship or honesty, and so occurs less often in sayings and stories. Wealth is something which can be used well, but may corrupt the rich and be used to exploit the poor, and is therefore important but at best an equivocal good.⁵⁰

My analysis of popular morality was based on material datable to the early Roman empire, and we cannot assume that the same ideas will be individually evaluated or corporately configured in the same way everywhere and at every period of Greco-Roman history. Collections of *gnomai* and *chreiai*, however, which were certainly made in every century of the Roman empire, and many of which probably derive from Hellenistic collections, have in fact a remarkable amount in common with early imperial popular morality, both in subject matter and in the way subjects are evaluated. They display, for instance, a core of topics which includes the gods and metaphysical powers such as fate and fortune; the nature of the world and of human life; power and government; virtues like justice, wisdom, self-control,⁵¹ friendship and honesty; vices like conflict, self-indulgence and pride; and equivocal qualities like wealth.⁵²

Attitudes to the gods in ‘wise men’ collections are consistently positive, relatively uncomplicated and very similar to ideas about the gods in popular

⁵⁰ Morgan (2007) 171–5. Popular morality does not distinguish between what we might identify as good things (like wealth) and good qualities (like hope).

⁵¹ Self-control, which is important to many philosophers, plays a larger role in these collections than in popular morality in general. Some aspects of it, however, like disapproval of gluttony and drunkenness, also appear regularly in popular morality.

⁵² ‘Wise men’ collections do sometimes attribute unusual views to individuals, especially Anacharsis, the only non-Greek among the seven sages, and Pythagoras (though both are also given conventional *dicta*): e.g. ‘Don’t step over the beam of a balance . . . don’t eat your heart . . . don’t walk the highway . . . abstain from beans’ (Gutas (2002) 77 (Pythag. 29.1); cf. Diog. Laert. 8.17). Most of these, as Diodorus explains, are allegorical and when explained, less odd than they sound: e.g. ‘Don’t step over the beam of a balance’, means ‘don’t overstep the bounds of justice and equity’. Anacharsis is a curiosity: a Hellenophile Scythian with (in some accounts) a Greek mother, he was an outsider both at home and abroad (Hdt. 4.76–7, Diog. Laert. 1.101–5). His opinions are sometimes conventionally Greek, sometimes shocking to Greeks (e.g. Diog. Laert. 1.104 against olive oil and the lies told in trade). He might be seen as personifying an important Greek concept, the acknowledged but problematic, porous boundary, and as such, as offering a lesson in his own person. For the Anacharsis tradition in general, see Kindstrand (1981) 17–32 (wise barbarians), 36–9 (reasons for his inclusion); Kindstrand argues, however (52), that no ethical system is visible in Anacharsis’ sayings; I believe one is, if we put (most of) Anacharsis’ sayings side by side with those of other wise men: so also Martin (1997) on the Cynic influence on Anacharsis stories.

morality as a whole. 'Acknowledge the gods', says Bias (Diogenes Laertius 1.8). 'Attribute your good actions to the gods' (Diogenes Laertius 1.90). 'Honour the gods', says Solon (Diogenes Laertius 1.62). Thales asks, 'Can one hide an evil deed from the gods? No, nor a thought' (Diogenes Laertius 1.36). 'All things belong to the gods', says Diogenes the Cynic. 'The wise are friends of the gods' (Diogenes Laertius 6.37). Diogenes also tells us that, 'Good men are the image of the gods' (Diogenes Laertius 6.51). The *Gnomai of the Seven Sages* tell us, 'Follow god. The god needs nothing; the wise man needs only god . . . Let your soul always be godly. The mind of man does not evade the god. The just man is the image of the god.'⁵³

There are some differences of emphasis between 'wise men' collections and popular morality as a whole. Though there is widespread agreement, for instance, that the gods are benign and helpful, the idea that human beings can be friends of the gods or reflect their image is much more characteristic of such collections than of other sayings and stories. Such variations are no surprise and reflect the distinctive status of philosophers and wise men in Greek culture. Overall, however, the similarities between *chreiai* and *gnomai* of wise men and popular moral material as a whole are much more marked than the differences.

Not all subjects in 'wise men' collections attract equally consistent evaluations, and in this too they are well in line with popular morality as a whole. Friendship is regularly praised, but it is seen as a more complex set of practices than honouring and following the gods. 'What is a friend?' the Emperor Hadrian asks Secundus. 'A sought-after name,' Secundus replies, 'a man nowhere evident, a possession hard to find, an encouragement in distress, the refuge of the unfortunate, an arm for misery to lean on, an observer of life, a man beyond reach, a valuable possession, unattainable good fortune.'⁵⁴ Wise men make clear the high value we do and should put upon friendship. 'Love friendship . . . Be benevolent towards your friends . . . Have *charis* [goodwill or gratitude] towards your friends . . . Be a friend . . . Use your friends.'⁵⁵ Collections of *gnomai* of the Seven Sages tell us to be careful in assessing potential friends ('Don't think your enemy your friend'⁵⁶), and not to rush to make friends.⁵⁷ Once we have made friends, however, it is important to stand by them in all circumstances, whether they are near or far away, fortunate or unfortunate. 'Don't judge those you love.'⁵⁸ 'Go slowly to the feasts of friends, quickly to their misfortune.'⁵⁹ 'Remember your friends whether present or absent.'⁶⁰ This

⁵³ Stob. 3.1.172–3. ⁵⁴ *Vita Secundi* 11. ⁵⁵ Stob. 3.1.172–3.

⁵⁶ Boissonade (1829–33) I, 139, Pittacus. ⁵⁷ *Ibid.*, Chilon.

⁵⁸ *Ibid.*, Solon. ⁵⁹ *Ibid.*, Chilon. ⁶⁰ *Ibid.*, Thales.

complexity closely matches that of popular morality as a whole, where one is repeatedly urged to be slow to make friends and assess potential friends carefully, but always to be loyal to established friends, to help friends and accept help from them, to trust them and value them as a treasure.⁶¹

Wealth is another subject which both 'wise men' collections and popular morality as a whole regard as complex, and which is also more morally problematic than most. Asked, 'What is wealth?' Secundus responds with a farrago of definitions, positive, negative and conflicted:

A burden of gold, the minister of pleasures, fear mingled with hope, a senseless reaping of profits, envy sharing one's board, a source of daily trouble, an unstable thing, a beloved piece of misfortune, a thing full of treachery, insatiable desire, a much-longed-for hardship, a high place to fall from, a value usually reckoned in money, transitory good luck.⁶²

Wealth is universally desired, but not universally good. 'Prefer loss to dishonest gain', advises Chilon.⁶³ It is a good thing to be able to help your friends in need, but wealth cannot be relied on and has to be husbanded. 'If you are lazy when you are rich, you will become poor', says a Greco-Egyptian school-text papyrus.⁶⁴ Bias contributes, 'Chance brings wealth to many . . . What occupation gives men most pleasure? Making money.'⁶⁵

Wisdom collections can be systematic without being simple, and sometimes their comprehensiveness seems to consist in saying, 'whether X is bad or good depends on context'. This is a common approach to moral problems in antiquity and is especially typical of popular morality.⁶⁶ Among more peripheral topics, some are again evaluated more consistently than others. Education, for instance, is usually seen as a good thing (though it may not always be the same kind of education that is in view).⁶⁷ Women, especially wives, are more complicated. They may be seen as helpmeets or rivals in marriage. Some say you should treat them well to stop them straying and others that if they are good-looking they will stray anyway.⁶⁸ They can be likened to a sharpened sword, a snake or a weasel.⁶⁹ It can be seen as foolish to express affection to a wife or to quarrel with her in public.⁷⁰ According to Theophrastus, whether you marry or not you will regret it.⁷¹ According to Thales, marriage is ruinous.⁷²

⁶¹ Morgan (2007) 98–102. ⁶² *Vita Secundi* 16. ⁶³ Diog. Laert. 1.69, Chilon.

⁶⁴ Boyaval (1975). ⁶⁵ Diog. Laert. 1.86. ⁶⁶ Morgan (2007) 179–82, 185–90.

⁶⁷ E.g. *Vit. Aes.* 109; *Sammelbuch griechischer Urkunden aus Ägypten* 1.5730; Diog. Laert. 1.92.

⁶⁸ *Vit. Aes.* 109; Reitzenstein (1900).

⁶⁹ *Les Papyrus Bouriant* 1; *Mons Claudianus Ostraca graeca et latina* 2.413.

⁷⁰ Diog. Laert. 1.92. ⁷¹ Diog. Laert. 2.33; cf. 4.47.

⁷² Boissonade (1829–33) I, 139, Thales; cf. *Vita Secundi* 11.

Are there ways in which the wisdom of *sophoi* is notably different from that of popular morality more generally, or even competes with it? Allowing for the tendency of sayings and stories to make a lot of marginally dissimilar points, it is, in fact, difficult to identify significant differences. For instance, a proverb and gnomic saying on papyrus both tell us to marry from among our equals, for those who marry above them become slaves to their wives.⁷³ Cleobulus warns us that if we marry above our own rank, we will find ourselves enslaved to our wives' relations.⁷⁴ The difference might be interesting for the study of Greek family dynamics, but the main point is the same: a man ought to be master in his own home.

We may be able to detect one or two differences of emphasis. Education, as I noted above, features occasionally in proverbs and gnomic sayings as a good thing, but wise men tell us regularly to educate our children; that the educated differ from the uneducated as trained horses from untrained or the living from the dead; that the roots of education are bitter but the fruit sweet; or that lack of education is the cause of all evils.⁷⁵ Fables sometimes suggest that being poor has the compensation that in times of trouble, one is likely to be in less danger than the rich and powerful.⁷⁶ *Sophoi*, very occasionally, commend poverty for its own sake: so, for instance, Pythagoras, hearing money mentioned one day, asked, 'What need have I of something which is given by luck and fortune, preserved by miserliness and meanness, and consumed by generosity and liberality?' Socrates, asked why he never acquired any land, said, 'I am ashamed to squabble with him who owns all the earth for a piece of it.'⁷⁷

Proverbs and gnomic sayings occasionally take the form of a question and answer, but it is common to find people asking questions of wise men and their answering with ethical advice. ('Being asked, "What grows old quickly?" he replied, "Gratitude"'.)⁷⁸ 'Wise men' collections also share with some schools of philosophy, especially Stoicism, a liking for paradox.⁷⁹ Usually these take the form of an unexpected opposition: so, says Pythagoras, 'It is because I love children that I do not want any.' 'It is proper that we grieve at living and rejoice at dying,' says Socrates, 'because we live to die and die to live.'⁸⁰ Very occasionally, a paradox is expressed as a fully fledged

⁷³ *Papyri greci e Latini* 2.120.33–5, cf. ps.-Diogenianus 6.22. ⁷⁴ Diog. Laert. 1.92.

⁷⁵ Diog. Laert. 1.91, 2.69, 5.17, 5.18; Gutas (2002) Pythag. 25, Soc. 14.

⁷⁶ E.g. Babrius *Fable* 4, 64; Phaedrus 4.6.

⁷⁷ Gutas (2002) Pythag. 2, Soc. 9. One might expect Diogenes to promote poverty in words, as he seems to in actions, but he concentrates on ridiculing the behaviour of the rich (in Arabic texts, though, many of the stories attached to Socrates' name look more Cynic than Socratic and perhaps originated as stories about Diogenes).

⁷⁸ Diog. Laert. 5.18. ⁷⁹ See e.g. the discussion of Mignucci (1999).

⁸⁰ Gutas (2002) Pythag. 4, Soc. 5.

sylogism. Diogenes Laertius' life of Diogenes records the saying, 'All things belong to the gods. Wise men are friends of the gods. Friends hold all things in common. Therefore all things belong to the wise.'⁸¹

The formal *variatio* in sayings and stories of wise men reminds us yet again of the flexibility of wisdom genres, and their tendency to interbreed both among themselves and with other genres. In content, though, it is the similarity between this and other popular moral material that is most striking. Greek and Roman culture as a whole displays a vast range of moral ideas and attitudes. 'Wise men' collections exhibit a much narrower range, and agree not only remarkably well among themselves, but with popular moral material more generally. It seems reasonable to assume that those who made and read or heard these collections regarded these topics, evaluated in these ways, as particularly significant and particularly useful to their audiences. Collections may not, therefore, have been comprehensive in the sense that they included every possible view of every possible ethical subject (what encyclopaedia does?), but they were comprehensive in the sense that they included everything that audiences and compilers thought mattered most.

Authority

It is clear, from the testimony of philosophers and literati and from the range of contexts in which moral sayings and stories were displayed, copied, articulated and put to use, that they had the widest currency across the ancient world.⁸² With currency goes authority: on doubtless very various levels and in various fashions, it is plausible to assume that sayings and stories were taken seriously and their advice followed. What we cannot imagine, and have no evidence to suggest, is that they were authorised by any one person or group. Moral ideas – about the upbringing of children, for instance, or adultery or remarriage – were from time to time the subject of legislation by political authorities, but no political, religious or cultural authority ever tried to devise a moral system for practical imposition on any sector of Greco-Roman society. Our sources, moreover, span over a thousand years and more than the geographical scope of the Greco-Roman world, and no one government, religion or culture enjoyed an equivalent breadth of authority. In the absence of any plausible 'top-down' model of authority, we must conclude that the authority of our sources came from within and across society itself: partly from whoever copied, taught or promulgated them, partly from those who read or heard them and found

⁸¹ 6.37. ⁸² Discussed in Morgan (2007) 25–30, 57–61, 85–8, 123–5.

that they reflected or helpfully informed their ethical practice, and partly from the characters into whose mouths the sayings were put and about whom the stories were told.

Of these sources of authority, the first two are familiar to historians of popular culture, but the last deserves a little more investigation. In what, precisely, does the authority of *sophoi* consist? It is a more complex question than appears at first sight, and it also bears on the nature of ancient encyclopaedism. It may therefore be helpful to invoke the aid of a modern authority on the nature of moral authority, who also has an interest in encyclopaedism, to explore what authority can mean.

In *Three Rival Versions of Moral Enquiry*, Alasdair MacIntyre identifies three types of claim to moral authority. The first is what he calls the ‘encyclopaedic’, which he connects with the nineteenth-century development of encyclopaedism. This asserts that knowledge is independent of context and editorial choice or intention. It can hope to be comprehensive, systematic and impersonal because the world, including the world of moral concepts, exists independently of observers and is accessible to analysis.⁸³

MacIntyre calls his second type of claim to moral authority ‘genealogical’. According to this, all knowledge is relative and context-dependent. Whether we call an idea or action right or true, depends on who is discussing or enacting it, in what circumstances, for what purpose and what audience. MacIntyre attributes this mode of thinking to modern scholars of the history of ideas, and above all to Michel Foucault and his ‘archaeology of knowledge’.⁸⁴

MacIntyre’s final type of claim to authority is what he calls ‘traditional’. According to this theory, one has to allow oneself to be formed by a set of ideas before one can judge them. MacIntyre attributes this way of thinking to religious traditions in general, to Christianity in particular, and above all to the theology of Thomas Aquinas.⁸⁵

MacIntyre’s analysis helpfully dissects ways of authorising moral thinking, all of which operate in different contexts in contemporary society. Does the authority of Greek wise men fall into one or another of his categories? I do not think it quite does. We have seen that our sources scarcely fulfil the aspirations of modern encyclopaedism. There is little to suggest that Greek popular wisdom worried much about the cultural specificity of its precepts.⁸⁶ People may have been expected to discover the authority of sayings and stories in part by allowing themselves to be formed by them,

⁸³ MacIntyre (1990) 77–81. ⁸⁴ MacIntyre (1990) 42–55. ⁸⁵ MacIntyre (1990) 61–8, 82–8.

⁸⁶ Though it may at least sometimes have taken it for granted (see above, n. 52); cf.

Harris-McCoy in [chapter 7](#).

but this does not explain why stories and sayings should be attached to the names of a small number of wise men. We need to look for yet another understanding of authority in Greek wisdom collections, and to do so we must shift our focus from the content of sayings and stories to the way wise men present their ideas, and the way they interact with their interlocutors.

Sophoi make a great many statements and issue many commands. ‘Know yourself.’ ‘Recognise the right moment.’ Why should listeners or readers obey them? Perhaps because they recognise that *sophoi* only articulate what they (listeners and readers) already believe. That suggests that the ultimate source of the wise man’s views is society itself, but that society feels the need to attribute its ethics to a specific figure who has some other (political or cultural) claim to authority. This is not an implausible hypothesis, as far as it goes – Greco-Roman society was in many other contexts strongly hierarchical, expecting and accepting the imposition of authorities – but it does not take us very far.

Wise men are also asked a great many questions and riddles. ‘Should I marry?’ ‘What is a friend?’ ‘What is the right time to eat lunch?’⁸⁷ They always respond, and apparently they are always right. The implication seems to be that they know anything they might be asked, in any category of knowledge. They are also frequently asked questions in the form, What is the greatest, or the best, or the worst X?⁸⁸ This format too implies exhaustive knowledge, along with the ability to deploy it to make comparisons.

This might suggest that the wisdom of wise men is of a modern, encyclopaedic kind, and the *sophos* articulates and authorises Greco-Roman ethics because he knows more than anyone else about the world Greeks and Romans live in. But that is not the whole story either, because the *sophos* does not simply know what there is to know; he does not simply observe, impersonally, the way the world is. He has a distinctive perspective which is at odds with that of the people round him and enables him to see what they cannot. He does not make the same assumptions about the world, nor about the meaning of questions as most people. In particular, in answering questions put to him, he frequently moves the goalposts and defeats expectation to give a quite different kind of answer from the one the questioner expected. (A fool may do the same, as a number of stories make clear, but the wise man does it intentionally, to make a point.)⁸⁹ In MacIntyre’s terms, the wise man is genealogically out of step with his contemporaries. When,

⁸⁷ Diog. Laert. 4.48, Bion; 5.20, Aristotle; 6.40, Diogenes.

⁸⁸ E.g. the questions of Amasis to the Ethiopian king, Plu. *Mor.* 153a (*Symposium of the Seven Sages*).

⁸⁹ So Aesop, for instance, in the *Life*, is repeatedly taken for a fool before proving himself wise.

for instance, Xanthippe reproaches Socrates for dying for no just reason, he ignores her main complaint, that he is dying, and pounces on the secondary one: 'Would you rather I were killed for a just reason?'⁹⁰ When Aesop's master orders the finest possible meal, Aesop, equivocating on 'finest', cooks tongue, on the grounds that it is the best thing for man – and then when he is told to produce the worst possible meal, serves tongue again.⁹¹ Seeing a woman being carried in a litter, Diogenes, untrammelled by conventions of perception, sees her as restricted rather than privileged and remarks that the cage is too fine for the creature it contains.⁹²

We rarely hear how wise men come by their eccentric perspective, though a few late stories talk of individuals visiting Egypt or India to study with gymnosophists or priests.⁹³ The question therefore remains, from where does their authority come? The answer seems to be that it does not come from anywhere – not the gods, nor education, nature, or society – outside the *sophos* himself. It derives from what an individual human being can achieve by looking carefully, independently, and without prejudice, at the world around him.

In MacIntyre's terms, therefore, the wise man's authority is not quite encyclopaedic because it is not simply objective knowledge of the world, nor does it derive only from society, since elements of it depend on the individual's unique perception of the world. It is not quite genealogical because it is not distinctive to any one age or group of people. It is not traditional, again because it is individual to each *sophos*. We might, I suggest, call it xenological – the authority of the deliberate insider-outsider, the man who moves beyond received tradition and the assumptions of his age to look at the world in a new way. If we were to look for a cross-cultural parallel, we might think of the Zen Buddhist masters, who through statements, stories, questions and answers, constantly surprise their followers with new perspectives and suggest new understandings of the world.⁹⁴

⁹⁰ Diog. Laert. 2.35. ⁹¹ Vit. Aes. 52–4.

⁹² *Mons Claudianus Ostraca graeca e latina* 2.413. Some collections show wise men competing with one another, and trying to undermine each others' authority.

⁹³ E.g. Diog. Laert. 8.3 (Pythagoras), 9.35 (Democritus), 3.67 (Plato). Early stories do not usually suggest that *sophoi* learn their unique perspective on the world through travel or encountering other cultures: even Solon's travels come when his reputation for wisdom is already established. This is so surprising, in a Greek world which at every period was so formed and informed by travel and cross-cultural encounter, that one suspects it must be intentional: wise men traditions are surely emphasising that the 'outsider' perspective of the *sophos* comes from within himself and not from what he has learned from others. The exception is the Scythian Anacharsis, who in early traditions acquires wisdom while travelling in the Greek world (Hdt. 4.76) and in later stories (Diog. Laert. 1.101–5) by having a Greek mother.

⁹⁴ See e.g. Reps and Senzaki (1957).

Greek wise men are unlike Zen masters, however, in that their aim is not to show that there is no such thing as reality or knowledge of the world. Although they delight in defeating their interlocutors' expectations and turning assumptions on their heads, their intentions are not primarily sceptical, nor do they aim to teach a radical and counter-intuitive view of the self or the world. On the contrary, as we have seen, Greek *sophoi* are not only made to recommend a strikingly stable repertoire of core and peripheral moral ideas; their ideas are also well in line with what we find elsewhere in popular morality. This may seem paradoxical: what is the point of having a radically xenological standpoint, only to espouse everyday popular morality? But the xenological perspective of wise men, if it does not change the content of morality, does add an extra dimension to it. It offers not so much a different set of ideas, as a different basis for understanding why these ideas are good and true. Xenological authority tells the reader or listener that truly to understand the right, the true and the good, they must learn to think outside the boxes of tradition and convention. If they do so, then (paradoxically, even ironically) they will be able to see that at least some aspects of tradition and convention, such as popular morality, are generally right. In every case, they will have a vantage point from which to comprehend their world and make the right decisions about how to behave in it. Since, however, to learn to think in this way takes more time, talent and mental effort than most people have at their disposal, stories and sayings of those who did achieve it are remembered, as an assurance and guide for the rest.

Who, though, are 'the rest'? Who heard, read, learned and used these sayings and stories? This is a difficult question, and we cannot do more than sketch some parameters of probability. I noted at the start of this essay that some sayings attributed to wise men (or, as in the case of Solon's 'I grow old always learning many things', generally accepted as composed by them) also appear in proverb collections. As proverbs, they probably circulated in every sector of society – but as something which 'everyone knows', not under the distinctive authority of the *sophos*. I also noted that *gnomai* and *chreiai* appear in elementary school-texts from the Hellenistic period onwards, so those who learned to read and write probably acquired at least a few that way. By the time of the Roman empire, these might amount to as much as 20 per cent of the male population, or conceivably even more, though we cannot be at all sure.⁹⁵ The audience of public inscriptions is notoriously tricky to assess: even if only a minority can read them, many more may

⁹⁵ Morgan (2007) 3 n. 8.

be told of their contents if they are thought sufficiently significant. Sayings of the seven sages are publicly inscribed in towns and cities across the Greco-Roman world, so a great many people at least potentially had access to them that way. Sayings and stories are much used by authors who (to judge by later citations and manuscript survivals of their work) were popular and widely read by the literary elite: for example Cicero, Seneca, Plutarch and Diogenes Laertius. In addition, the number of surviving manuscripts of collections of sayings and stories themselves suggests that they were popular among literati in their own right, and not merely when embedded in other works. In all, we should probably conclude that *gnomai* and *chreiai* of wise men circulated extremely widely among the cultured, the literate and the illiterate alike, although as one descended the socio-cultural scale or crossed cultural boundaries it is possible that they increasingly often came adrift from their original authorities.⁹⁶

Conclusion

In conclusion, I suggest that the wisdom and authority of Greek *sophoi* does indeed constitute a form of encyclopaedism. It does not tell us in detail everything we need to know to act well, but it tells us that if we have the right standpoint, we can understand everything we need to know, and exert leverage on any aspect of the world we may want to assess. It reinforces the authority of what is widely believed with that of what any individual would be able to see if he were wise enough fully to understand his world.

In addition, the ‘core and peripheral’ presentation of the contents of our collections functions as another kind of encyclopaedism. What users regard as the most important areas of ethical concern (to practise and to communicate to others) are covered most fully, and less important ones, less fully. And here we can see how ‘wise men’ collections might bridge the gap between ancient *enkyklios paideia* and modern encyclopaedias. They function as a basic curriculum of morality: in their own way systematic, comprehensive and authoritative.

Through school-texts, works of literature and oral dissemination, by being collected, repeated and interbred with other genres, ‘wise men’

⁹⁶ See above, n. 11. Oikonomopoulou in [chapter 6](#) describes how collections of *problemata* are referred to by Gellius and Plutarch as books which were available for consultation in libraries. Were collections of sayings and stories of wise men used in the same way? No direct reference survives, but it is credible that an author like Plutarch, who uses a great many *gnomai* and *chreiai*, and also proverbs and fables, made use of collections.

collections must have been accessible to a wide spectrum of society. Their contents tally remarkably well with the contents of other genres of popular morality, notably fables and proverbs. They were heard, read and copied from the Hellenistic period onwards, throughout the Greco-Roman world and beyond. Their authority was the authority of widespread opinion, aspiration, and a profound and culturally ingrained admiration for what individual *philosophoi* could achieve on behalf of their society. Their comprehensiveness was that of what people felt they needed to know to survive, and their system was that of a society tolerant of miscellaneity. The remarkable number of texts which survive, and the range of contexts and media in which they survive, shows how culturally central and influential they were throughout the Hellenistic and Roman worlds and beyond.

The Greeks did not invent the idea of the wise man whose eccentric viewpoint and personal authority could guarantee a system of morality. Similar figures appear in India, Tibet and China from around the sixth century BCE.⁹⁷ The Indian *Atharva Veda* tells a story, which also appears in early Tibetan Buddhism, of seven sages who preserved civilisation by retreating into the Himalayas during a great flood which covered the world.⁹⁸ In China, the Tang dynasty is remembered for producing seven sages – one of whom, unusually, was a woman.⁹⁹ Since all these regions are connected to the Greek world by long-standing trade routes, it is tempting, and plausible, to suspect a degree of cross-cultural interaction and perhaps influence here, though we cannot be sure in which direction. Nor did the idea of the sage, and especially the group of sages, lose its appeal in later European culture. ‘The Seven Sages of Rome’ is a middle-English poem which probably originated in India. In Arabic it is known as the ‘Book of Sindibad’ and it also survives in Syriac, Greek, Hebrew, Old Spanish, Persian, Latin, Old French and later European versions.¹⁰⁰ The broad outline of the story is always the same. A young prince is sexually harassed by his stepmother, the queen. He rebuffs her and in retaliation she accuses him of attempted rape and he is condemned to death. His life is saved by seven wise men who secure a stay of execution by entertaining the king for seven days with stories of the wickedness of women. On the eighth day, the prince speaks in his own defence and the queen is executed. The seven sages are the keepers

⁹⁷ E.g. in northern India, the sages of the Hindu Upanishads, Gautama Buddha and Mahavira the founder of the Jains (all in the sixth–fifth centuries); in Persia, Zoroaster (c. 500 BCE or as early as c. 1200?); in China, Confucius and Lao Tzu (both c. sixth century).

⁹⁸ 19.2.2–12. ⁹⁹ The empress Wu Zetian.

¹⁰⁰ The story has obvious affinities with the *Arabian Nights*, in several manuscripts of which the Arabic version appears.

of society's morality, and their stories, oblique and fabulous as they are, restore the moral order of a society gone wrong.

In 1704 an anonymous satire was published in London under the title 'The Seven Wise Men', lampooning seven prominent political advisors of Queen Anne in scurrilous terms. It was followed in 1719 by 'The Seven Wise Men of England', while more light-hearted readers could obtain 'The Seven Wise Mistresses of Rome', a set of racy biographies of famous women from Greek myth, Roman history and the Old Testament.¹⁰¹ In 1909, S. R. Crockett published a novel, *The Seven Wise Men*, in which a young nonconformist preacher, about to take up his first appointment, is warned by the principal of his training college to look out for the 'seven wise men' – the members of every congregation who sit on the sidelines observing everything that happens, and always know better than the minister. As recently as 1967, R. M. Gunmere titled his study of early American history, *The Seven Wise Men of Colonial America*. Long after *chreiai* and *gnomai* of the Greek sages have ceased to be required reading in schools or the moral touchstone of a wide sector of society, sages, alone or in groups, continue to attract us with their idiosyncratic and compelling view of the world.

¹⁰¹ By Thomas Howard, published 1686.

6 | Plutarch's corpus of *quaestiones* in the tradition of imperial Greek encyclopaedism

KATERINA OIKONOMOPOULOU

Rethinking the ancient *quaestio*

The inclusion of ancient *quaestiones*-literature in a book about encyclopaedism before the Enlightenment might strike some readers as surprising. Yet the main argument of this chapter is that ancient Greek and Latin texts written in this form do indeed have a claim to the title encyclopaedic – notwithstanding the problems that ensue from our anachronistic use of this term.¹ They do so because of their key function as textual means of collecting and systematising knowledge that spans a variety of fields or themes. This function, the trademark of projects of encyclopaedic scope, is already inscribed in the technique of question-and-answer, which was developed as an interactive mode of research and validation of knowledge in the context of more or less formal didactic praxis.² This later paved the way for the subsequent recording of these enquiries in written form, and their collection in larger textual corpora of *quaestiones*, which could then be flexibly reconfigured or restructured, as well as expanded, or abridged.³ We can identify this formal fluidity and open-endedness as another feature that links *quaestiones*-literature with other literary kinds that were, throughout antiquity, particularly well-suited for projects of knowledge accumulation, especially lexica (most characteristically, Pollux's *Onomasticon*), miscellanistic collections of heterogeneous subject matter (such as Athenaeus' *Deipnosophistae*), and Pliny the Elder's monumental *Natural History*.

I will here focus my investigation on four imperial Greek *quaestiones*-collections, written by the Platonist philosopher Plutarch of Chaeronea at some point between the late first and early second century CE.⁴ Each employs different variants of the question-and-answer technique in order to launch enquiries into natural science (*Natural Questions*, henceforth

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¹ See Doody (2009) 1–5 and the introduction to this volume, pp. 1–5.

² Jacob (2004a) 31. ³ Jacob (2004a) 34–5.

⁴ On the dating of these collections, see Harrison (2000) 194, 197–8.

QN),⁵ Greek and Roman culture and customs (*Greek and Roman Questions*, henceforth QG and QR, respectively),⁶ and Platonic exegesis (*Platonic Questions*, henceforth QPl).⁷ The four texts formed part of a richer production of works in the question-and-answer format by the philosopher (totalling 13 titles), of which, together with his *Table Talk* (henceforth QC),⁸ they are the only ones that survive to this day.⁹ They are also integral to a larger imperial literary tradition of writing problems, represented by authors such as Seneca, Philo of Alexandria, Heraclitus, Alexander of Aphrodisias, and Porphyry.¹⁰ They are especially significant because they constitute perhaps the most thematically wide-ranging, single-authored *quaestiones*-corpus of imperial Greco-Roman antiquity.¹¹ Their sheer polymorphism testifies to the tremendous versatility of the question-and-answer format as a means of organising knowledge in this period. It thus allows us to situate *quaestiones*-writing at the heart of a broader Greco-Roman imperial impetus to produce, organise, and monumentalise knowledge of all sorts, through (in most cases) prose. This is a phenomenon whose cultural and intellectual ramifications, and importance for our interpretation of a significant segment of imperial Greco-Roman literary production have recently become the subject of groundbreaking study by classical scholars.¹² Plutarch's *quaestiones* yield especially rich opportunities for a productive exploration of the conditions under which such writings were read, their cultural resonance and intellectual outlook. They also matter as key exponents of a literary aesthetic that is characteristic of imperial projects of knowledge accumulation: this entails an

⁵ From the Latin title *Quaestiones Naturales* (Greek: Αἰτία Φυσικά/Αἰτίαι Φυσικάί).

⁶ From the Latin *Quaestiones Graecae* (Greek: Αἰτία Ἑλληνικά/Αἰτίαι Ἑλληνικάί), and *Quaestiones Romanae* (Greek: Αἰτία Ῥωμαϊκά/Αἰτίαι Ῥωμαϊκάί), respectively.

⁷ *Quaestiones Platonicae* (Greek: Πλατωνικά Ζητήματα).

⁸ From the Latin *Quaestiones Convivales* (Greek: Συμποσιακά Προβλήματα), literally translatable as *Sympotic Questions*, or *Sympotic Problems*. See Klotz and Oikonomopoulou (2011).

⁹ See Harrison (2000) 193–4.

¹⁰ On Aristotle, see below. The other relevant works are Seneca (first century CE), *Natural Questions*; Philo (first century BCE–first century CE), *Questions on the Genesis and Exodus*; Heraclitus, *Homeric Questions*; Alexander of Aphrodisias (second–third century CE), *Problems* (probably not a genuine work), *Φυσικά Σχολικά ἀπορίαι καὶ λύσεις*, *Ἠθικά Προβλήματα*; Porphyry (third century CE), *On Aristotle's Categories*, and *Homeric Questions* (in various recensions).

¹¹ The authenticity of, especially, the QG had been disputed in the past, mostly on unsound arguments: see Halliday (1928) 13.

¹² Murphy (2004) on Pliny the Elder; König and Whitmarsh (2007b), on a variety of ancient compilatory literature. See also Braund and Wilkins (2000); and Jacob (2001) on Athenaeus; Morgan (2007) and this volume, on miscellanistic order in imperial ethical literature.

experimentation with different structural schemes, and a preference for transitions that are associative, and often abrupt, rather than logical or following criteria of thematic coherence; a predilection for inconclusiveness, which strongly conveys the sense that a project is incomplete, or unfinished; and a restless negotiation of ideas of totality. Accordingly, the present chapter will pursue a detailed investigation of precisely these key aspects, with a view to reaching a nuanced understanding of Plutarch's *quaestiones*-collections as projects of knowledge accumulation that sought to play an integral role in the intellectual culture of their time. It also argues, seemingly paradoxically, and despite these elements of inconclusiveness and open-endedness, that they have a significant amount in common with the ideals of comprehensiveness usually associated with encyclopaedic writing.

Scholars of classical antiquity have long been reluctant to acknowledge a culturally central role for the Plutarchan *quaestiones*-collections, which remain marginal even within the relatively under-studied Plutarchan *Moralia*. Most classicists in fact commonly think of them (the QC perhaps excluded) as nothing more than Plutarch's sub-literary collections of personal notes (*hypomnēmata*), and tend to dismiss their content as narrowly scholastic.¹³ This attitude seems striking, if compared with the intense scholarly work on medieval and Renaissance *quaestiones*-literature (the tradition of writing *quaestiones* continued, albeit with breaks and retransformations, into both those periods),¹⁴ which has treated such works as integral to the history of medieval and Renaissance encyclopaedism.¹⁵ In recent years, however, some exciting research has surfaced, which has paved the way for the exploration of Plutarch's corpus of *quaestiones* along altogether new and groundbreaking lines. Pascal Payen's volume of essays on the QG and QR is the most seminal among them: it was the first scholarly work to propose an investigation of the two collections as a unified project, drawing particular attention to their dynamics of parallelism.¹⁶ This has promoted a fresh consideration of them as projects akin to Plutarch's *Parallel Lives*, which share some of the latter's cross-cultural vision and intellectual

¹³ See Rose (1924) 50–1; Halliday (1928) 14; Pearson and Sandbach (1965) 135; and Cherniss (1976) 3–4. On the QC, see Fuhrmann (1972) viii–ix. On Plutarchan *hypomnēmata*, see Van der Stockt (1999a) and (1999b).

¹⁴ The medieval 'genre' of *quaestiones* in fact begins in the thirteenth century. Lawn (1963) traced it back to the 'scientific renaissance' that took place in Salerno in the thirteenth century, in which the 'rediscovery' of Aristotle's *Problems* played a key role. See also Blair (1999a) and (1999b); Monfasani (1999).

¹⁵ In addition to the works just cited, see Ventura (2004) and (2007) 277.

¹⁶ Payen (1998a). On reservations concerning their being written as a unified project, see Swain (2000).

sophistication. Payen's volume also offered the first set of studies that drew attention to Plutarch's hellenocentric perspective as a key element that determines the presentation of material in both collections, and highlighted the centrality of the geographical theme in them. Both these approaches were taken up by subsequent scholarship, which has further enhanced our view of the two collections as culturally meaningful and coherent projects. A recent essay by Rebecca Preston has proposed that Plutarch's different degrees of cultural distancing (and underlying hellenocentrism) are reflected in the differing formats of the question-and-answer technique in each collection. Preston also insightfully explores the implications of this divergence for addressing broader questions of cultural authority and identity in the two works.¹⁷ John Scheid, finally, has argued that the *QR* is organised in such a way as to constitute a virtual tour (*periêgêsis*, in Greek) of the city of Rome: its enquiries, in other words, are structured around a topographical plan, that of the forum of Rome, which thus operates as a kind of mnemotechnic 'skeleton' for the work.¹⁸ Scheid's study brings to the fore the affinities the *QR* shares with other key imperial texts which invest landscape and geography with cultural meaning (most importantly, Plutarch's so-called Delphic dialogues, and Pausanias' *Periegesis*).¹⁹ But it also raises broader, intriguing questions about readership and about the density and depth of cross-cultural encounters between Greeks and Romans in Plutarch's time.

Plutarch's *QN* and *QPI* have, by comparison, received much less attention, let alone been subject to such radical reassessment. However, recent work by scholars such as Sven-Tage Teodorsson, despite its rather traditionalist focus on these latter collections' sources, has usefully highlighted their intellectual hybridism, and experimentation with different styles of philosophical explanation.²⁰ It thus invites fruitful comparisons with the rich intellectual tapestry of Plutarch's other three collections, including that of the *QC*, a work which partially overlaps with them in terms of its scientific and philosophical interests.²¹

Building on and furthering these approaches, my discussion will begin by broadly contextualising the reading and use of *quaestiones*-texts during

¹⁷ Preston (2001).

¹⁸ Scheid (2005–6) believes the *QR* can be construed as a kind of 'promenade imaginaire dans la vieille Rome.'

¹⁹ Namely, *The E at Delphi*, *The Oracles at Delphi no longer Given in Verse*, and *The Obsolescence of Oracles*. See Galli (2005). On Pausanias, see Hutton (2005) 54–174. Cf. Whitmarsh (2009) for the role of landscape in Philostratus' *Heroicus*.

²⁰ Teodorsson (1999). See also Santaniello (1999), and Senzasono (1999).

²¹ See recent study of this text by König (2007); also Klotz and Oikonomopoulou (2011).

the high Roman empire, in order to reconstruct the broader intellectual climate in which the writing and consultation of such works would have flourished. I will then proceed to look closely at the subject matter and internal organisation of Plutarch's *QN*, *QG*, *QR* and *QPI*, drawing particular attention to the ways in which these sustain a peculiar and idiosyncratic, yet characteristically imperial version of encyclopaedism.

Plutarch's *quaestiones* in context: reading *quaestiones*-literature in the high empire

Plutarch's *QN*, *QG*, *QR*, and *QPI* are texts which offer next to nothing in the way of clues about their purpose and anticipated readership.²² This reticence has long been taken as evidence of their sub-literary character. Hypotheses about their purpose and readership can be made more concrete however, if we take into account the way in which Plutarch himself and other authors of the imperial period represent their own reading of what most scholars agree was their model-text, the (pseudo-)Aristotelian (to them, genuinely Aristotelian) naturalist collection of *Problems*.

The pseudo-Aristotelian *Problems* brings together various strands of the Peripatetics' encyclopaedic labour. According to Pierre Louis, it gained an unprecedented popularity following Andronicus of Rhodes' new edition of Aristotle in the first century BCE.²³ It was still widely read in the late first and early second century CE, the period during which Plutarch wrote his corpus of *quaestiones*. The influence it exercised on Plutarch's own *quaestiones* is unquestionable, and can be traced not only in these collections' literary format, but, in the case of the *QC* and the *QN* especially, also in aspects of their content.²⁴ By Athenaeus' time, the *Problems* was such a popular work that an itinerant showman from Alexandria called Matreas 'wrote parodies of Aristotle's *Problems* (ἐποίησε δ' οὗτος καὶ παρὰ τὰς Ἀριστοτέλους ἀπορίας) and read them in public (καὶ ἀνεγύγνωνσκε δημοσίᾳ): "Why does the sun sink but not dive?"; "Why do sponges soak up wine but not get drunk?"; and "How can accounts be reconciled, if they don't argue with one another?" (Athenaeus, *Deipnosophistae* 1.19d–e, transl. S. D. Olson).²⁵

²² We do possess testimonies on the much later (medieval) reception of the *QN* only: see Pearson and Sandbach (1965) 133–43. The only contemporary testimony is an unhelpful cross-reference to the *QR* by Plutarch himself (*Rom.*15.7).

²³ Louis (1991) xxx–xxxv; also Barnes (1997) 24–44.

²⁴ E.g. *QN* 1 (911d–e) and *QC* 1.9, echoing ps.-Arist. *Probl.* 932b4–7; 25–8, 933a17–26, 935a5–8.

²⁵ Olson (2006–11) vol. 1, 107–8, with his notes.

Athenaeus' comment that Matreas 'inspired admiration among the Greeks and Romans' (19d) gives a good hint at the parodic performance's success and popularity. At any rate, this popularity eventually led to a second edition—recension at the end of the second century CE, which probably effected the rearrangement of the collection's contents resulting in its current thirty-eight books, as well as entailing changes in the contents themselves (addition and probably also removal of material).²⁶

This key development in the *Problems*' textual history speaks of a text open to continuous input, both elastic (that is, receptive of accretion and augmentation, and, equally, of abbreviation or omission) and plastic (that is, open to reshaping and restructuring); a text, therefore, that was truly encyclopaedic (in the sense that it allowed for continuous production of updated versions).²⁷ Jacob assimilates it to a set of 'index cards' ('fiches') distributed in 'folders' ('dossiers de travail'), an open, working text, in other words, which, however, ranks above a heterogeneous set of *hypomnēmata* because of the coherence of its language and style.²⁸ This openness is further confirmed, and offers hints about the ways other imperial problem-texts might have been read, if we look at a revealing set of testimonies from two key readers of (probably different versions of) the text in the second century CE, Plutarch himself and Aulus Gellius.

In the opening scene of QC 8.10, Plutarch's Roman patron and friend Mestrius Florus is depicted as reading from a copy of what he refers to as Aristotle's *Natural Problems* (Προβλήματα Φυσικά – one of many texts within the wider body of Aristotelian *Problems* literature) that he encountered (ἐντυχών) in Thermopylae, the place where he and his friends spent some (probably leisurely) time together.²⁹ The text stresses that the Aristotelian enquiries acted as a stimulus for Florus to formulate and pursue enquiries of his own. He 'was himself full of questions' (αὐτός τε πολλῶν ἀποριῶν . . . ὑπερίπλετο . . .), we learn, 'as is natural for a philosophical spirit' (ὅπερ εἰώθασι πάσχειν ἐπιεικῶς αἱ φιλόσοφοι φύσεις, 734d). Crucially, the text continues, Florus communicated (μετεδίδου) his enquiries to his friends (*ibid.*), a statement which emphasises the communal and interactive context in which it all took place. By responding in this way, the opening narrative concludes, Florus confirmed the Aristotelian maxim that 'great

²⁶ Louis (1991) xxxiii–xxxv.

²⁷ Cf. the fifteen editions and 'continuous revision' policy of the *Encyclopaedia Britannica* (*Encyclopaedia Britannica* s.v. 'encyclopaedia').

²⁸ Jacob (2004a) 43–4.

²⁹ 734c–d. On the title προβλήματα φυσικά as one of the variant titles of Aristotle's *Problems*, see Louis (1991): xxx–xxxv. Teodorsson (1996) 282 speculates that Florus probably owned a villa near Thermopylae.

learning gives many starting points' (πολυμάθεια[ν] πολλὰς ἀρχὰς ποιεῖ[ν]: *ibid.*).

QC 8.10's opening narrative is revealing on the simultaneous existence of different intellectual operations surrounding the use of the *Problems*: solitary reading, side by side with the practice of philosophical enquiry (based on the guidance the text offers) together with others – all in a leisurely setting; active engagement with the text (suggested by the verb πᾶσχειν, which figuratively alludes to the text's impact on the philosophical reader), but also use of it as a platform for new enquiry (marked by the inceptive verb ὑπεπίμπλατο),³⁰ which is, moreover, as rich and varied as the text's variegated content itself (note the symmetry between the terms πολλῶν ἀποριῶν-πολυμάθειαν). The analogy stresses the educational subtext of miscellanistic *variatio* (a point to which I shall return), and the passage as a whole is instructive on the keen interest imperial readers (and communities of imperial readers) took in the content of such texts, in settings other than institutional.³¹

Perhaps the emphasis on Florus' reading from the *Problems* is meant to make a point about his Roman unfamiliarity with Greek science. For the standard manner of engagement with the text in the various sympotic discussions narrated by the QC is evocation from memory in an oral context, which entails a creative sort of 'plagiarism' of its contents. The ease with which the characters adapt the text's arguments to their own purposes is remarkable. Plutarch himself, for example, speaks as follows in QC 1.9:

ἐπεὶ δὲ πᾶν τὸ λιπαρὸν δυσέκπλυτόν ἐστι καὶ κηλῖδα ποιεῖ, λιπαρὰ δ' ἡ θάλασσα, τοῦτ' ἂν αἴτιον εἴη μάλιστα τοῦ μὴ καλῶς πλύνειν. ὅτι δ' ἐστὶ λιπαρά, καὶ αὐτὸς εἴρηκεν Ἀριστοτέλης. οἱ τε γὰρ ἅλεις λίπος ἔχουσιν καὶ τοὺς λύχνους βέλτιον παρέχουσι καομένους, αὐτὴ θ' ἡ θάλαττα προσραينوμένη ταῖς φλοξὶ συνεκλάμπει, καὶ κάε-
ται μάλιστα τῶν ὑδάτων τὸ θαλάττιον· ὥς δ' ἐγῶμαι, διὰ τοῦτο καὶ θερμότατόν ἐστιν.

But since everything oily is hard to wash and makes a stain, and the sea is oily, this would surely be the reason for its not cleaning efficiently. That the sea is oily Aristotle himself has said. For salt contains fat, so making lamps burn better; and seawater itself, when it is sprinkled into flames, flashes up with them. Indeed among waters it is particularly seawater that is flammable, and, in my view, this is the reason why it is also the warmest. (627c–d, transl. P. A. Clement and H. B. Hoffleit)

Plutarch claims that seawater is not good for washing clothes, because it has an oily consistency. He bases his answer on the authority of Aristotle, but does not quote a particular Aristotelian argument. He appears, instead,

³⁰ 'He began to have' (sc. many questions) (see LSJ s.v. ὑποπίμπλημι).

³¹ See also Oikonomopoulou (2011) 109–11 for further discussion of this passage.

to mix-and-match arguments drawn from three different sections of *Problems* Book 23: the sea is oily (λιπαρά);³² it is because its salt contains fat;³³ seawater strengthens flames;³⁴ it is most flammable (κάεται μάλιστα);³⁵ this is why it is also very warm.³⁶ Such mastery requires a level of familiarity with the *Problems* and its content that is surprising to modern readers. What it makes clear, however, is that, for at least a certain type of imperial philosophical reader, the *Problems* was not a static, fixed text, but a creatively adaptable treasury of directions of enquiry, methods, arguments and scientific observations, as well as a cast for that reader's own 'Aristotelian' voice.³⁷

Aulus Gellius, the author of the *Noctes Atticae* (*Attic Nights*, henceforth *NA*), is our second case study. Gellius lists *quaestiones* among his genres of miscellanistic predecessors (preface 7); and reads, or presents his characters as readers of, problem-works by Aristotle and Plutarch (in the latter case, the *QC*).³⁸

Problem-texts possess the status of literary authorities for Gellius. He expresses elegant praise of the qualities of Aristotle's *Problems* in the following terms:

Aristotelis libri sunt, qui Problemata Physica inscribuntur, lepidissimi et elegantiarum omnigenus referti.

There is a work of Aristotle, entitled *Physical Questions*, which is most delightful, and filled with choice knowledge of all kinds. (*Attic Nights* 19.4.1)

Lepidus ('charming', 'delightful', but also 'amusing') is an apt characterisation for the 'amusing' topics Gellius next provides as examples (why the bowels loosen when one is seized by sudden fear, and why one has an urge to urinate after sitting for some time before a fire: 19.4.2–6). But it leaves no doubt that the ancients found the text (and texts like it) engaging, interesting, and entertaining precisely because it treated such colourful topics taken from everyday life.³⁹

Problem-works written by both Aristotle and Plutarch feature above all as books (note the statement *libri sunt*, literally 'there are books', above) in the *Attic Nights*. These books are available in libraries, or in private copies, and are accessed, read, excerpted (the latter designated by the Latin verb

³² *Probl.* 932b 4–7; 935a 5–8. ³³ Cf. 935a 7–8.

³⁴ Cf. 932b5. ³⁵ Cf. 933a17–26; 935a5–8. ³⁶ Cf. 932b6.

³⁷ See Oikonomopoulou (2011) for a fuller discussion of the role oral recollection plays in the *QC*'s attitude to Peripatetic knowledge.

³⁸ *NA*: 1.11.17–19, 2.30, 3.5–6, 4.11.11–13, 17.11, 19.4–6.

³⁹ Cf. Gell., *NA* 3.6.1 ('*per hercle rem mirandam*').

praecerpere: 2.30.11) and cited in a variety of ways (summary, paraphrase, or verbatim quotation in Greek, or in Latin translation). This may take place in the context of writing a new work: Gellius repeatedly states that he read and excerpted from the *Problems* for the purpose of writing his own miscellany.⁴⁰ It may also happen when there is a need for verification of knowledge that is cited from memory, as in the case of the Peripatetic who 'from the library of Tibur, which at that time was in the temple of Hercules and was well supplied with books, took out a volume of Aristotle and brought it to us' (NA 19.5.4).⁴¹ Finally, excerpts from the work can stand on their own as philosophical guidance: this is the purpose for which Taurus selects a relevant passage from the *Problems* and sends it to one of his pupils in order to discourage him from associating with men of the stage (20.4).

Gellius also sketches a semi-institutional setting involving reading from the *Problems*. *Attic Nights* 19.6 narrates a scene where Gellius reads a passage from a copy of what he refers to as Aristotle's *Natural Problems* together with his philosophical teacher, the Platonist Calvenus Taurus.⁴² The phrase he uses, '[w]hen I had read this at Athens with our friend Taurus' (*[h]oc ego Athenis cum Tauro nostro legissem*, 19.6.2) might imply the study of a text under the guidance of a teacher, a process known by the Greek term συνανάγνωσις ('reading together'), common in philosophical teaching of later antiquity.⁴³ The two men play discrete roles in such a context: Gellius (the pupil) requests Taurus' opinion, and Taurus offers it. The critical scrutiny which the two men undertake of Aristotelian causation regarding the manifestation of redness and paleness in people experiencing shame and fear, respectively (19.6.2–3), is characteristic of the type of educational stimulus a text like the *Problems* could provide: it could offer material for the honing of critical skills, and, through them, for the formulation of new, or better questions – such as the question Taurus formulates at the end of the chapter, which is an advance on the Aristotelian one (19.6.3).

It would be naïve to deny the idealised character of the scenes just discussed. Plutarch and Gellius after all share an intellectual agenda which is underpinned (much more systematically in Plutarch's case than in

⁴⁰ See NA 2.30, 3.6, 19.4.

⁴¹ *promittit e bibliotheca Tiburti, quae tunc in Herculis templo satis commode instructa libris erat, Aristotelis librum eumque ad nos adfert*. The book in question is in all likelihood a problem-collection, as we can tell from the type of investigation it is concerned with.

⁴² See Lakmann (1995); Holford-Strevens (1997).

⁴³ See Mansfeld (1994) 193–4. The *cum* qualifies both *legissem* and *percontassem* (introducing a temporal *cum*-clause), and *Tauro* (zeugmatic link), which emphasises the joint character of the reading.

Gellius') by philosophical ideals of learning. This necessitates the valorisation of problem-posing, in both its oral and written dimensions, as an expression of a philosophical disposition *par excellence*.⁴⁴ Even so, the styles of consultation that they sketch, imprinted as they are in the textual history of the pseudo-Aristotelian *Problems*, allow us accurately to map this text, and other texts like it, on to imperial Greco-Roman antiquity's intellectual landscape. The pseudo-Aristotelian *Problems* was a work that was approached first and foremost as a definitive literary record of past enquiries: an encyclopaedic text that could be read, discussed, or mined for its informative content, thus functioning much like modern reference works, which are consulted by readers because of their comprehensiveness. Simultaneously though, these authors also present it as a text that could be treated as a variegated template of enquiry – that is, as a work which served as an inspiration for the independent pursuit of knowledge, by offering its readers a key set of models on what constitute suitable subjects for enquiry, as well as on how questions can be successfully formulated and answered by following rigorous logical procedures, employing specific rhetorical strategies, and summoning a wide range of theoretical knowledge and empirical evidence. This didactic subtext is also a crucial aspect of its encyclopaedism, for it sets the ground for the successful continuation of enquiry, with a view to encompassing, ideally and ultimately, the total sum of knowledge available.⁴⁵ Last but not least, Plutarch and Gellius draw vivid portraits of these texts' users: Greeks and Romans, authors of scientific and miscellanistic literature, philosophical teachers and their pupils, and members of the intellectual elite entertaining themselves at symposia and other types of elite social gathering. They thus allow us to gauge the cultural import communities of imperial *pepaideumenoi* ('educated men') ascribed to their consultation.

Plutarch's *quaestiones*: content and intellectual outlook

At first glance the limited thematic scope of Plutarch's collections of *quaestiones*, each of which is singularly dedicated to the treatment of a specific

⁴⁴ On the QC's educational agenda, and its philosophical underpinnings, see König (2007), Kechagia (2011) and Oikonomopoulou (2011). On Gellius', see Morgan (2004) and Beall (2004). On the constructed nature of Gellius' reading scenes, designed so as to 'privilege[s] the activities of learned commentators', see Johnson (2009), and (2010), 98–136 (quotation from 110).

⁴⁵ See Fowler (1997) and North (1997) for a discussion of both these aspects.

topic, makes them fall short of the encyclopaedic range of their model-text, the pseudo-Aristotelian *Problems*. However, taken together as works which distil the research endeavours of a single author, they showcase Plutarch's impressive ability to engage with different areas of human knowledge in a meticulous and systematic fashion – a skill that parallels the encyclopaedic zeal of his intellectual predecessors, the Peripatetics. Further, a close look at their contents shows that they are works which integrate a remarkable variety of learning from different sources, and methodological approaches from different fields, in order to devise well-rounded explanations for their queries. In this sense they, too, lay claim to being comprehensive, just like projects we unquestionably designate as encyclopaedic. Let us look closely at some characteristic examples.

The QG comprises a total of fifty-nine enquiries into the origins of various Greek communities' religious customs and cultural practices. *Quaestio* 38 conveys their distinctive flavour. 'Who', it asks, 'are the "Psoloeis" and who the "Oleiai" among the Boeotians?' In the answer, the reader is referred to a local myth: the daughters of Minyas, Leucippe, Arsinoe and Alcathe, were maddened by Dionysus (μανείσας), and, as a result, cast lots between them in order to determine whose children could be slaughtered. The unlucky victim was Hippasus, Leucippe's son, who was promptly torn into pieces by the frenzied women. The Minyads' husbands, who wore dark clothes in order to express their grief, were thus called 'Psoloeis' (the adjective φολόεις meaning 'sooty', or 'smoky'),⁴⁶ and the women themselves were called 'Oleiai', the name, as Plutarch tells us, equivalent to the adjective δλοός, meaning 'destructive', or 'murderous', 29e–f).

Both the form of the enquiry (beginning with 'who..?', rather than with 'why..?'),⁴⁷ and its focus on the meaning of two local names, align this *quaestio* with the methods of Greek scholarship and lexicography, both traditionally devoted to antiquarian investigations. This association with the world of Greek scholarly research serves to confirm what Rebecca Preston has identified as the collection's inside perspective on Greek matters,⁴⁸ which leads it to stress its privileged access to non-mainstream, local knowledge. Going back to our example, Plutarch's Greek readers would presumably have been as well acquainted as we are with the myth of Dionysus, and the role Boeotia played as the gruesome setting where the god's rites were first established in Greece.⁴⁹ However, the myth of the Minyads that is

⁴⁶ See Halliday (1928) 167.

⁴⁷ See Preston (2001) 96. 'Why'-questions in the QG: 27, 28, 31, 33, 35–9, 45–58.

⁴⁸ Preston (2001) 107–8.

⁴⁹ See Euripides' *Bacchae* (which was very popular throughout antiquity).

narrated offers a less well-known (though no less bloody) alternative to the much more familiar story of King Pentheus and Agave. This predilection for rarer, highly localised versions of widely known myths, and for stories set on the sidelines of major mythical or historical events, runs through the collection.⁵⁰ It comes hand-in-hand with an interest in small and historically marginal Greek communities of the islands (Corcyra, Aegina, Lemnos, Tenedos, Samos, Ithaca, Rhodes), tribal areas (Locris, Aenis, Macedonia), the colonies of the Chalcidice peninsula or Asia Minor (Sane, Epidamnus, Cnidus), as well as (in most cases) politically insignificant Greek mainland cities (Epidauros, Messene, Megara, Orchomenus). Boeotia, in our example, was an area known throughout antiquity as a cultural backwater of Hellenism.⁵¹

Such a focus on the peripheral presumes unusual, extraordinary erudition, in the form of an impressive command of sources (local histories, but also writings on various cities' constitutions).⁵² It also requires the conjunction of wide historical *paideia* with scholarly and linguistic skills, and geographical knowledge. Last but not least, it calls for the mobilisation of 'inside' knowledge proper. This is why Plutarch concludes the investigation by introducing his personal testimony as a Boeotian: 'Even today' (καὶ μέχρι νῦν), he remarks, 'the people of Orchomenus give this name to the women descended from this family [*sc.* of the 'Oleiai']. Plutarch then mentions the Agrionia festival, in which the priest of Dionysus ritually pursues these women, and has the power even to kill them. 'In our time' (ἐφ' ἡμῶν), he adds, 'the priest Zoilus killed one of them.'⁵³ Zoilus died an ugly death soon after this act, and a lawsuit on the part of the victim's relatives caused his family eventually to lose the privilege of hereditary priesthood (299f–300a).

The QR is the lengthiest collection within Plutarch's corpus of *quaestiones*, comprising a total of 113 enquiries into various Roman customs. Let us examine *quaestio* 24: 'Why have they in the month three beginnings or fixed points, and do not adopt the same interval of days between them?'

⁵⁰ Key examples include the story of Neoptolemus acting as arbiter between Odysseus and the murdered suitors' families (14), the Tyrrhenians' raid upon Attica in order to seize the Athenian women, subsequent expulsion from their islands of Lemnos and Imbros, and migration to Laconia (21), Achilles' murder of Tenes, the hero who gave his name to the island of Tenedos (28), and Agamemnon's stopover at Eretria, during which his captive women sacrificed at the Thesmophoria (31). See also 37 and 41.

⁵¹ See also 8, 19, 37, 40–1.

⁵² Halliday (1928) 14–15, attributes most of the QG's material to the Aristotelian–Peripatetic *Constitutions*. See also his notes for hypotheses on other sources.

⁵³ Preston (2001) 109–12.

The 'three beginnings' refers to the Calendae, Nones and Ides, the three key reference points around which the Roman calendar month was organised. In both form and length, this *quaestio* differs greatly from the one we have just examined. It is articulated as a 'why'-question, thus more openly flagging its interest in causes; and it is considerably more experimental when it comes to the provision of explanations, offering two alternative answers to the question that is asked: the first answer, attributed to Juba and his followers (οἱ περὶ τὸν Ἰόβαν) is that the Calendae were thus named because this was the day the officials called (ἐκάλουν) the people in order to announce the Nones five days later. The Ides, on the other hand, was a holy day (269c). The second answer is that each of the three days corresponds to a different phase of the moon, the Roman calendar being lunar: the Calendae corresponds to the day of the new moon, when the lunar orb is invisible (which suggests the name for the day derives from the Latin verb *celari*, 'to be hidden', and its derivatives, such as *clam*, 'secretly'). The Nones corresponds to the first appearance of the moon (what Plutarch calls the 'new moon', νουμηνία), which suggests that the name derives from the Latin word for 'new' (*novus*, sharing the same root with the Greek νέος). The Ides, finally, correspond to the day of the full moon, and their name derives from the word εἶδος ('beauty'), signifying the beauty of the moon's full orb (269c–d).

This *quaestio* too enlists an encyclopaedic range of knowledge in constructing its dual answer. Plutarch draws his first explanation from the Mauretanian king Juba, whose work on the similarities between Greek and Roman cultures (fittingly entitled Ὅμοιότητες) provided inspiration for Plutarch's own project of cross-cultural comparison.⁵⁴ He also shows himself to be a master of both the Greek and Latin languages, to a depth that enables him to detect their common roots, and comfortably etymologise Latin words on their basis. He exhibits the sensitivity of a comparative ethnographer, who seeks to translate Roman culture in terms that are comprehensible to his Greek readership. This explains his careful manipulation of linguistic analysis: the names for all three days naturally all derive from specific Latin roots, but he only acknowledges these when there is no Greek equivalent for them (as in the case of *clam*, and *celari*, for Calendae). At the same time, he displays the biases of a hellenocentric observer, when, in deriving the Ides from the Greek word εἶδος, he presumes Greek origins for Latin cultural usage.⁵⁵ Finally, he adduces scientific knowledge in order to pre-empt criticism of the Romans' inaccurate calculations:

⁵⁴ On the use of this work as a source in the *QR*, see Rose (1924) 20–7.

⁵⁵ On this, see Preston (2001) 98–106.

we must not be persistent in seeking to find out the most precise number of days (οὐ δέϊ δὲ τῶν ἡμερῶν τὸν ἀκριβέστατον ἀριθμὸν διώκειν) nor disparage approximate estimations (οὐδὲ τὸ παρ' ὀλίγον συκοφαντεῖν); for even now (καὶ νῦν) that astronomy has advanced so much, the irregularity of the moon's movements continues to defeat the expert knowledge of mathematicians, and elude their calculations. (269d)

Once again this is Plutarch's personal perspective, offered in the form of a scientific observation which allows his Greek readers to understand that the Romans' differing perceptions of time, and the differences in social organisation that these entail, are not just a question of 'cultural difference', but ultimately emanate from a scientific problem, which concerns the accurate prediction of the moon's movements.

The scientific touch with which QR 24 concludes provides a fitting transition to the QN, the collection whose 31 enquiries are closest in spirit to the pseudo-Aristotelian *Problems*. Thus, QN 12 asks: 'What is the reason for the clearness and calm produced when the sea is sprinkled with oil?' The focus on a naturalist problem pertaining to the sea is reminiscent of Book 23 of the pseudo-Aristotelian *Problems*. Echoes of that book are in fact to be found across the Plutarchan collection,⁵⁶ suggesting that Plutarch carefully consulted it prior to composing his own naturalist *quaestiones*. The format of this *quaestio* (it is articulated as a 'why'-question), putting the focus on the underlying physical causes of a natural phenomenon, also echoes the typical form of Peripatetic naturalist enquiry, as encountered in the *Problems*. Moreover, Plutarch also gestures to the authority of that collection by citing the Aristotelian opinion on the problem first: 'Is it, as Aristotle says, that the wind, slipping over the smoothness so caused, makes no impression and raises no swell?' (914f).⁵⁷ Plutarch however finds this answer inadequate. It only explains the external phenomenon (τὰ ἐκτός) plausibly (πιθανῶς). In an attempt to offer a more substantial causation, Plutarch articulates two answers of his own: the first is that the oil is denser than the sea, which is admixed with earthy matter and uneven in its internal constitution. As a result, the oil displaces the sea when quantities of the two liquids are mixed together. When, later, sea water flows back to its initial position, this leaves gaps (πόροι), which allow for much clearer visibility underwater (915a). The second answer is that the air that is normally admixed with sea water is usually affected by the water's disturbance and roughness, thus losing its clarity and transparency. This is however averted when oil is sprinkled on the sea's surface, causing the air to regain its normal clarity (915a–b).

⁵⁶ See 1, 2, 4, 7–9, 10, 11.

⁵⁷ Not extant in the current ps.-Arist. *Probl.*

The answers that Plutarch offers are typical of the *QN*'s scientific spirit: they blend empirical observation on the interaction between different liquids with scientific reflection on their physical properties. Oil may be sprinkled on the sea's surface, causing temporary calmness; or it may be carried by divers to the sea's depths, thus enhancing visibility underwater. These effects are then explained as emanating from differences in the two bodies' internal constitution, which have to do with their qualities of density (πυκνότης) and regularity (ὁμαλότης). The concepts derive from a wider background of ancient scientific theory (going as far back as the Presocratics),⁵⁸ which describes bodies and substances in terms of opposing qualities: heat and cold, wetness and dryness, roughness and smoothness, evenness and irregularity, density and looseness. Our *quaestio* presumes familiarity with this system, as well as with other key scientific concepts, such as that of the passages (πόροι), understood as channels that are carved through material bodies, interrupting their internal continuity;⁵⁹ the notion that physical bodies may as a result of external influences expand, or contract (διαστολή and συστολή); and the fact that substances may be either pure (as oil is presumed to be) or admixed with other elements (καταμεμιγμένα).

Finally, the *QPI* is the shortest of all collections, dedicating ten enquiries to various questions of Platonic exegesis. *Quaestio* 6 attempts to explicate an obscure statement that Plato articulates in his *Phaedrus*:⁶⁰ 'In what sense is it asserted in the *Phaedrus* that the pinion's nature (τὴν τοῦ πτεροῦ φύσιν), by which what is heavy is raised on high, is among things of the body most closely akin to the divine?' The two answers that are proposed presume solid knowledge of Plato's writings, as well as of a wider background of Platonic philosophy. This is because both attempt to shed light on the problem according to the principle of 'explaining Plato from Plato', that is, by recourse to well-known aspects of Platonic 'doctrine' (thought by imperial Platonists to be a complete and fully elaborated system of philosophical thought).⁶¹ Thus, Plutarch's first explanation proposes a metaphorical interpretation based on Plato's theories of recollection and love (found in the *Symposium* and the *Phaedrus* itself): by 'wing' (πτερόν), the beauty of the body is meant, which stirs the soul to remember (ἀναμνησκει) its experience of higher, divine things. The second explanation, thought to be simpler than the first, derives from Plato's theory on the tripartition of the soul (also encountered in the *Phaedrus*). According to it, the 'wing' is a reference to the soul's rational faculty (ἡ λογιστικὴ καὶ διανοητικὴ [*sc.* δύναιμι]), able to

⁵⁸ Anaximander and Empedocles. See Lloyd (1964).

⁵⁹ This theory is also Empedoclean.

⁶⁰ 246d–e. ⁶¹ Karamanolis (2006) 1–28.

lift it above the base and mortal preoccupations, in order to contemplate things divine (1004c–d).

Seen as a whole, the *QPs* explorations steadily guide the reader along the path of philosophical reflection, exploring, through Platonic eyes, god, the cosmos, the limits of human knowledge, and the nature and interrelation of body and soul. However, naturalist enquiry and scholarly investigation hold an important place here as well, helping to illustrate complex philosophical concepts such as that of ἀντιπερίστας (reciprocal replacement, 7), or to discourse on the different parts of speech (10).

Quite clearly then, Plutarch's *quaestiones*-collections are projects of impressive learning, which synthesise a wide range of source-material and intellectual approaches for the purpose of investigating even the most abstruse or complex topics. It is thus not far-fetched to think of them as texts that endorse an ideal of encyclopaedic polymathy. This is conceived in Peripatetic terms, as learning that is meant to be productively incorporated in order to give 'many starting points' – that is, opportunities for fresh or more sophisticated enquiries, which can lead to the conquest of new areas of knowledge.

Selective reading: the Plutarchan *quaestiones* as reference works?

Strictly speaking, Plutarch's *quaestiones*-collections are miscellanistic works, that is, writings which blend together a wide array of different queries, with no apparent system or single organising principle underpinning their accumulation. This makes them integral parts of the Roman empire's wider tradition of miscellanistic writing.⁶² However, the term 'miscellany' can only prove useful in understanding these texts up to a point. It should not preclude our thinking of them as 'encyclopaedias', for two reasons. The first is that the Plutarchan *quaestiones* lack of an overarching ordering scheme is in fact not incompatible with their function as reference works. Secondly, they are not completely unsystematic. On the contrary, as this section and the one following will show, they experiment with different ways of arranging their material, each of which carries its own underlying logic.

The case studies that we isolated in the previous section alert us to a key aspect of Plutarch's *quaestiones*: namely, that they have been composed as

⁶² See Morgan in [chapter 5](#).

collections of discrete enquiries, each of which can stand on its own. Simon Goldhill has recently argued that texts which exhibit this feature are key exponents of an imperial attitude to knowledge, which sought the condensation of classical antiquity's vast body of transmitted learning into short, bite-sized units, which could be readily consulted and selectively reused in new contexts.⁶³ If the enquiries contained within Plutarch's *quaestiones* were indeed assembled with such an end in view, this would make a strong case for the function of these texts as informative compendia of knowledge, compiled in order to be used as works of reference.

Indeed, these works share several features which give credence to such a hypothesis. The first is their overall modest lengths, which facilitate efficient scanning of their contents in order to locate information. Secondly, the conciseness of the individual *quaestiones* that they comprise (which is often extreme, especially in the case of the QG) aids the reader's memorisation of empirical observations, historical knowledge, scientific and philosophical concepts, and arguments that are introduced, debated or refuted. Once memorised, this knowledge could then be reproduced, or (as the example of the pseudo-Aristotelian *Problems* has already suggested) flexibly reused in order to serve new intellectual ends. What is more, no logical continuity seems to exist between the different enquiries contained within each collection, such as can be found in other large-scale philosophical and scientific treatises from antiquity (such as Aristotle's works on animals, for example). Even when related topics are examined (as we will see in the next section), the reader gains little sense of an attempt being made towards a methodical treatment of a wider or more complex area of enquiry. The technique of *variatio* ('variety'), which dictates that enquiries should succeed one another on the basis of their differences, rather than similarities in theme, in conjunction with the absence of cross-references within each collection (which are kept to a bare minimum) compounds this feeling. It seems, then, highly plausible that Plutarch's *quaestiones* are deliberately designed so as to encourage piecemeal reading of their contents – and, it follows, the isolation of information from their contents, in an attitude to knowledge that is characteristic of reference works.

In what sorts of contexts might these works' contents, once extracted and memorised or copied, have been reused? The investigation of the mythical and historical origins of Greek and Roman cultural practice in the QG and QR would have had a powerful resonance in an era during which the past and cultural 'identity' were recurrently negotiated.⁶⁴ The QG's

⁶³ Goldhill (2009), esp. 106–13.

⁶⁴ See Preston (2001) 86–93.

enquiries in particular would have fully satisfied the Second Sophistic's taste for mythical and historical knowledge with a vivid local colour.⁶⁵ Moreover, its focus on peripheral Hellenism is also a Second Sophistic construction, celebrating fragmentation as the perennial feature of the Greek world (largely left unchanged by the Romans), while also drawing attention to some of its most unpleasant side-effects (inter-city strife, migration) prior to the stabilising impact of Rome.⁶⁶ Similarly, the *QR*'s interest in Rome's customs was part of a wider predilection for the cross-cultural examination of customs, exploring Greek traditions against those of the Romans, Egyptians, Persians, Jews, and others. In Plutarch's time, such questions routinely featured at symposia, as imperial Greek literature of the symposium, written by him (his *QC*) and authors like Athenaeus, testifies.⁶⁷ They also emerged in the context of visits to Greek oracles, places which stirred memory of the past and prompted reflection on the diachronic continuity of Greekness. Plutarch's Delphic dialogues offer vivid narratives of how this process worked: the Greek cities' abundant dedications to the Delphic sanctuary, which the religious visitors encountered in the course of their guided tour around the site, triggered enquiries into their background, historical circumstances, nature, and purpose. Those, in turn, acted as a means of recalling key events of the Greek past, and renegotiating its legacy through critical reflection and dialogue.⁶⁸

Similarly, the *QN*'s investigations do not emanate from a scientist's ivory tower, but are anchored in the economic and cultural parameters of practical life: agriculture, animal husbandry, hunting, fishing, sea-faring, swimming, feasting and drinking. As Plutarch informs his readers in *QN* 29, these are meant to inspire wonder at everyday phenomena, whose marvellous nature (τὸ θαυμάσιον) is usually unnoticed by people accustomed to be fascinated by the rare and the unusual (919b).⁶⁹ Enquiries of this sort could also naturally spring up in real-life settings such as the symposium (as our earlier discussion of scenes from Plutarch's *QC*, in which characters appear to read or cite from the pseudo-Aristotelian *Problems*, also suggested). Inspired

⁶⁵ See Whitmarsh (2009) 211, and (2010) 1–16. ⁶⁶ See Preston (2001) 108–9.

⁶⁷ E.g. *QC* 1.10, 2.4, 5.2–3. Such scenarios of oral reperformance could also provide a compelling explanation for Plutarch's insertion of his personal voice in *QG* 38 and *QR* 24 (examined above): under conditions of oral discourse, this would function as an effective communicative tool.

⁶⁸ E.g. *De Def.* 397e–398a, 398d–e, 400d–e, 401b–d, 401e–f. Delphi was the focus of cultural, as well as religious, pilgrimage. On the topic, see esp. Rutherford (2003); and Elsner and Rutherford (2005). On Plutarch and Delphi, see Swain (1991).

⁶⁹ This may well be a reference to the genre of paradoxography, which flourished in the period of the empire.

by the physical reality of consumption at the symposium, they prompted the exploration of topics such as the origin, nutritional benefits, and cultural value of sympotic staples such as wine, bread, water, fish, meat and vegetables (which could then ramify into the investigation of broader natural phenomena). They were also the result of curiosity about the material dimension of objects used at the symposium, or seen in religious locations such as Delphi: vessels, musical instruments, statues or sculptures.⁷⁰

Platonic exegesis would have ensured an equally wide public: exegetical *quaestiones* were performed in public settings as declamatory displays, and covered Homeric themes, such as those featuring in Heraclitus' allegorical *Homeric Questions*.⁷¹ They could also concern philosophical topics, like the ones broached in the *Orations* of Maximus of Tyre, which discuss similar topics to the ones found in Plutarch's *QPl*: Socrates, the relationship between body and soul, and Platonic theology. Perhaps not accidentally, the individual titles of these *Orations* are often in interrogative form.⁷²

It is unfortunately impossible to track the reception of Plutarchan *quaestiones*' contents in their own time in a more concrete fashion. What seems certain, however, is that, in their function as reference works, they would have furnished ample starting points for thought, discussion, debate, and entertainment on key intellectual preoccupations of their era, and thus held anything but a marginal role in their contemporary cultural scene.

Consecutive reading, and its subtexts

On the other hand, it would be impossible for any reader of Plutarch's *quaestiones* to isolate a query of particular interest to his pursuits without first thoroughly scanning the collection. No table of contents is included with any of these works, nor even a summary of their chapters (as in the *QC*, for example). Thus, the collections seem to presume a consecutive reading of their contents at least once. Their modest lengths are, once again, instrumental, enabling readers quickly to scan their contents. A lot is invested in this act of consecutive reading, in fact, showing that the texts' structure obeys a specific aesthetic, that of *variatio*, which is underpinned, in turn, by a didactic subtext.

⁷⁰ E.g. *QC* 2.6, 3.10; *De Def.* 395c–396c.

⁷¹ Russell (2003) 217–34; Pontani (2005), 38–40. Cf. *Plut.*, *QC* 9.13, featuring a debate between two rhetoricians on a Homeric problem, with Sluiter (2005).

⁷² See esp. *Diss.* 3, 7, 8–9, 11, 17–18, 20–1, 41, with commentary by Trapp (1997).

Consecutive reading quickly reveals that our collections' individual *quaestiones* are grouped in variable patterns. Certain lines of enquiry may be pursued in depth, and this is seen in the existence of thematic clusters. Typical cases would be QG 16–18, and 54–7, which pursue a succession of enquiries into the customs of Megara and Samos, respectively;⁷³ or sections 7–12 of QN, which explore various questions concerning seawater and the sea.⁷⁴ Themes may be revisited at later points, often persistently. A characteristic example is the recurrence of enquiry into Roman marriage customs and ceremony in QR. It is taken up at the very beginning of the work (the first two questions), and recurs at various points later (6–9, 29–31, 65, 87, 105, 108), often independently resorting to the same kinds of historical aetiology (for example, the rape of the Sabine women).⁷⁵ Equally frequently, enquiries succeed one another in an associative fashion. This is illustrated well by QR 10–14, where the first investigation (10: of the Roman custom of covering the head during religious worship) branches out, associatively, to the examination of exceptions to (11 and 13), or other manifestations of, the custom (14), and, arising from an explanation at the end of 11, an enquiry into why Saturn is considered the father of truth.⁷⁶ Finally, independent, one-off topics frequently arise, often interrupting a thread of related material. The end of QPI 2 (arguing that god is called the supreme father and maker of all things because he crafted the universe out of body and soul, the latter of which he begot) would have naturally led to QPI 4 (which explores the terms of the interrelation between body and soul),⁷⁷ but the association is interrupted by an intervening (and highly technical) investigation of the division of reality into mathematical segments in the divided line of Plato (*Republic* 6, 509d–513e).⁷⁸

Such a meandering sequence of loosely stitched-together material is not in fact unique to these collections: several authors of ancient compilatory texts profess to write 'in a haphazard manner, not systematically but as each came to mind'⁷⁹ (Plutarch QC 2, preface 629d), or opt for an associative style of arrangement. In texts like Plutarch's QC and Athenaeus' *Deipnosophistae*, this is meant to reflect the associative twists and turns of sympotic conversation. In texts like Gellius' *Attic Nights*, it is meant to reflect the author's own associative leaps at the moment of composition. The common

⁷³ See Boulogne (2002) 404–5. ⁷⁴ 913f–915b. Cf. QR 109–13 (289e–291c).

⁷⁵ QR 29, 31, 86–7, 105. Other recurring explanations concern the fear of infidelity (7, 9, 65); the Romans' avoidance of marriage to their kin (6, 108).

⁷⁶ See Boulogne (2002) 320–2. ⁷⁷ 1000e–1001c, and 1002e–1003b, respectively.

⁷⁸ QPI 1001c–1002e. Cf. QPI 5–7, with Cherniss (1976) 4. See also e.g. QR 104–8.

⁷⁹ σποράδην δ' ἀναγέγραπται καὶ οὐ διακεκριμένως ἀλλ' ὡς ἕκαστον εἰς μνήμην ἤλθεν. Cf. Gell., NA, preface 2 and Pamphila, in Photius, *Bibl. Cod.* 175, 119b.

denominator is the link drawn between the order of the textual product and a cognitive process (such as memory, or mental association) or work method (such as reading, excerpting) from which it emerged.⁸⁰ In other words, it ties miscellanistic order to a certain 'epistemology' (in Christel Meier's use of the term).⁸¹ Variety of subject matter was, moreover, thought of as conducive to learning in the ancient world. Seneca the Elder, in his *Controversiae*, says that curiosity is stirred best when fresh material keeps emerging: 'Let my little book', he says to his son, 'always have something new (*aliquid novi semper habeat libellus*), so that it keeps you intrigued (*sollicitet*) through the alternation not only of (new) opinions but also of (new) speakers (*non tantum sententiarum . . . sed etiam auctorum novitate*). The desire to get to know the unknown is more intense than the desire to go back to what is known' (*acrior est cupiditas ignota cognoscendi quam nota repetendi*) (4 preface 1–2).⁸²

How does this help us make sense of the miscellanistic order of Plutarch's *quaestiones*? In the first instance it alerts us to an association of its form with a variety of research styles: intensive investigation of larger themes, but also interest in the odd particularity; revision of topics, either because their investigation was paused, or temporarily diverted to other issues, or simply as a result of a desire to add new insights and perspectives to their understanding; and associative transition from one research question to another, which testifies to an investigation that is given free rein to branch out, without constraints of focus. The combination of these styles can only reflect ongoing and inconclusive research – a project involving lifelong engagement, such as the one Gellius undertakes, when he promises to continue collecting his 'delightful little memoirs' (*memoriarum delectatiunculae*, preface 23) for as long as the gods (and the availability of leisure time) permit. This lack of conclusion is further highlighted by the arbitrary endings to each collection, which seem deliberately to point to the fact that the last word on the topic is still forthcoming. In effect, we have the preconditions for accretive, and, notionally at least, infinitely expandable texts. Thus, much like the pseudo-Aristotelian *Problems* before them, Plutarch's *quaestiones* craft themselves as open-ended, elastic texts-in-progress.⁸³ Moreover, miscellanistic order speaks of texts whose varied learning (πολυμαθία/*aliquid novi*) can indeed offer their readers 'many starting points', in the sense that it stirs their curiosity for new knowledge. This knowledge is in part

⁸⁰ See Small (1997) 179–81. ⁸¹ Meier (2004) 93–114.

⁸² See Morgan (2007) 257–73 for a wide-ranging discussion of these functions of miscellanistic writing.

⁸³ See Sluiter (2000) 191–2, for a discussion of a similar 'openness' in ancient commentaries.

offered by the threads of enquiry already contained within the texts, but may also, as the QC has instructed us, be ‘discovered’ through the formulation of new questions (inspired by the texts).⁸⁴ The way is thus paved for the continuation of enquiry in the future.

Understood in such terms, miscellanistic order stands as an admission of the inherent difficulty of capturing the totality of available knowledge: ‘any piece of writing must be selective . . . and so intrinsically incomplete’, as John North puts it.⁸⁵ But it is, for the same reason, an expression of an underlying desire for encyclopaedic completeness, whose fulfilment can only be guaranteed through the continuation of research, perhaps *ad infinitum*. Thus, a key characteristic of the ancient miscellanistic text is that it looks outside itself to a larger sum of knowledge that can be explored and captured in textual form.

In addition to expressing such a desire, the texts also make a gesture towards the potential of this desire’s fulfilment. This is done by hinting at an inchoate, but potentially stable, overarching scheme of organisation, a scheme that would represent the neat ordering of their research through an all-encompassing, meaningful structure. Two case studies might illustrate what I mean. The first is the QG. The text, as we have seen, consists of a miscellanistic array of questions concerning linguistic usage and custom in what seems to be a random sample of Greek cities, islands, or tribal regions. But as we have already noted, we may detect an attempt towards a comprehensive geographical coverage: the places mentioned cover the entirety of the mainland Greek geographical domain (from the Peloponnese to Thrace, and from the Ionian islands to Samos), and extend to the Aegean islands and the colonised areas of Asia Minor and Italy.⁸⁶ Further, the text construes Greekness in terms of a tension between locality and discrete communal identity on the one hand (seen in the recurrent discussion of rituals, or interstate conflicts concerning community boundaries),⁸⁷ and network or interconnectedness on the other.⁸⁸ Incidentally, a similar tension also emanates from the QC, as Jason König has demonstrated,⁸⁹ which alerts us to the constructed character of Greekness in both texts. This is a Greek world that is highly fragmented, but also highly connected through trade, religious rites, colonisation expeditions, war and peace treaties. Above all, it is connected because of geography, which determines the movement of

⁸⁴ See parallels in Gell., NA preface 13 (*primitias quasdam et quasi libamenta ingenuarum artium dedimus*); and Clement, *Strom.* 6.1, quoted by Morgan (2007) 268–9.

⁸⁵ North (1997) 184, 186–7. ⁸⁶ Already noted by Payen (1998a) 49–55.

⁸⁷ QG 8, 11, 13, 15, 17, 21, 26, 30, 46, 52, 59.

⁸⁸ QG 5, 11, 13–14, 16–17, 20–1, 29, 30, 35, 41, 44, 49, 54–8. On ancient networks and connectivity, see Malkin (2003).

⁸⁹ König (2007) 62–7.

cities, peoples, embassies, or armies in space: the Aenianians settle successive neighbouring regions of central and south-western Greece during their migrations (13, 26); Odysseus is exiled from the Ionian island cluster of Cephallenia, Zacynthus and Ithaca for the murder of the suitors, and subsequently moves westward to Italy (14); the island of Samos closely interacts in various ways with its neighbouring cities of Asia Minor: Priene, Ephesus, Miletus (20, 55–7).⁹⁰ Colonisation, the Trojan expedition, and the centrality of Delphi entail links and movements on a grander scale, which transcend the local level.⁹¹

Plutarch could have structured his material in such a way as to give prominence to the geographical theme. He could, for example, have clustered some of his enquiries together by region (the Peloponnese, Epirus, Macedonia, the islands). Alternatively, he could have utilised the theme of travel, making his topics follow the narrator's (notional) journey from one Greek region, city or place to another (this was common in ancient geographical writing, and what both Strabo and Pliny did before him);⁹² equally, he could have structured material around specific geographical hubs (such as Delphi; this is a scheme Pausanias followed after him).⁹³ Perhaps the text, if it were to expand into an 'exhaustive' inventory of Greek usage and custom, would indeed be arranged in one or more of these ways. But the QG, as it stands, seems to shun such organisational options, as the shifts of geographical focus from question to question are quite arbitrary (but note the strong presence of associative links, which I discussed above). Yet the emphasis on the theme of Greek connectivity acts as a subtle prompt for the reader (both ancient and modern) mentally to reorder the QG's material according to any one of the geographical schemes sketched above. Needless to say this would require a reader actively engaged in the process of reading, and ideally with a solid overview of the material (probably through sequential reading).⁹⁴ The wider geographical space occupied by the Greek world thus emerges, albeit only tentatively, as a viable topographical backdrop for the work's disparate contents, left to future readers to explore.

⁹⁰ See also QG 45–6, 49.

⁹¹ QG 9, 11, 12, 15, 21, 22, 30, 35, 41, 44, 46. This sense of Greek connectivity is further enhanced through a variety of narrative and linguistic devices, which cannot be fully listed here: one is the explanatory method itself, which sees the local in terms of the general; but also through vocabulary stressing relationships of geographical proximity and connection (e.g. 297f: γειτνιῶντες; 303d–e: ἐκ τῆς Ἐφεσίων χώρας εἰς Σάμον διέπλευσαν); or geographical markers (rivers, plains: 293f–294c; 297b–c; 303d).

⁹² See Clarke (1999a) 193–244; and Murphy (2004) 129–64. Cf. also the topographical ordering scheme of *De Def. Or.*

⁹³ See Hutton (2005) 68–126.

⁹⁴ Cf. n. 18, above, on Scheid's analysis of the topographical order underpinning the QR.

The second case study is the *QN*. We can discern in the text an incipient classificatory scheme on the basis of the following thematic rubrics: matters of nourishment (1–5); the sea (8–, or perhaps 7–12); plants and agriculture (14–16); animals and human activities connected with them (18–26). The reader is offered hints that these categories may expand to wine and drinking (10, 27, 30–1). The categories have a precedent in the pseudo-Aristotelian *Problems*, where in the current version Book 1 discusses medical issues (in which nourishment is central); Book 3 wine-drinking and drunkenness; Book 10 animals; Book 20 certain types of plants; and Book 23, as we have already seen, the sea. If, as we saw, the reorganisation of this text into its current thematic units took place at the end of the second century CE, the thematic clusters offered by the *QN* might be taken as a hint that the present thematic versions circulated as early as Plutarch's time. Moreover, the emphasis on plants and animals pays homage to the Peripatetics' monumental work on zoology and plant classification, as represented by Aristotle's *History of Animals*,⁹⁵ and Theophrastus' *On the Causes of Plants*. This is matched by the Peripatetic ancestry of the text's scientific vocabulary, and its echoes (in some cases, adaptations) of theories found in the *Problems*.⁹⁶ Thus the *QN* as a whole forges strong links with an ideal of encyclopaedic comprehensiveness that is specifically Peripatetic, and pays homage to the Peripatetic encyclopaedic achievement.

The hints at such organisational possibilities beneath the surface of miscellanistic *poikilia* (variety) illustrate the mechanism according to which order and disorder, coherence and fragmentation (both terms used by König) can coexist in an ancient miscellanistic text.⁹⁷ They convey a sense of the colourful variety of ordering schemes available to Plutarch, but they also draw attention to the power of miscellanistic *poikilia* to supersede totalising schemes of order, even when such schemes were clearly possible. The *quaestiones*, we should conclude, are not collections of Plutarch's notes, but self-consciously fashion themselves as texts-in-progress for reasons in fact intrinsic to the kind of encyclopaedic function they envisage for themselves.

Conclusion

Imperial Greco-Roman antiquity did not coin the word 'encyclopaedia', nor did it produce an encyclopaedic movement that can be plausibly

⁹⁵ See, e.g. *QN* 14, with *HA* 622a8–13. Cf. also Athen., 7.316a–318f; Aelian, *De Nat. An.* 7.11, and *VH* 1.1.

⁹⁶ Overview of the main theories in Pearson and Sandbach (1965) 138–41.

⁹⁷ König (2007) 50–6.

construed as the intellectual predecessor of Renaissance or Enlightenment encyclopaedism.⁹⁸ It did however see an incredibly intensified production of miscellanistic and compilatory writings, all of which are integral expressions of wider impetus towards organising and systematising knowledge.⁹⁹ As our study of Plutarch's *quaestiones* has, I hope, shown, despite all legitimate reservations, the term 'encyclopaedia' is indeed good to think with when examining compilatory and miscellanistic literature produced under the empire, for a number of reasons. First, it allows us to establish that, in imperial Greco-Roman antiquity the concept of a reference work was far from unknown, and that the consultation of texts for the purpose of extracting knowledge was very much embedded in contemporary intellectual practice. Secondly, it leads us to realise that in Greco-Roman antiquity, as today, aspirations to comprehensiveness, and the desire to capture all available knowledge motivated the accumulation of knowledge and its consolidation into large textual corpora – even if the resulting textual products are far from approximating to the exhaustiveness of modern encyclopaedias. Thirdly, it brings to the fore the preoccupation with textual order that runs through this period's compilatory writing, as well as these texts' constant experimentation with different organisational schemes for their contents. This allows for bolder comparisons with modern encyclopaedic projects, and urges us to be more confident in tracing the precursors of modern encyclopaedism back to Greco-Roman precedents.

At the same time however, Plutarch's *quaestiones* allow us to detect a distinctive aspect to Greco-Roman imperial encyclopaedism, which sets it apart from modern encyclopaedic writings' standard function as textual archives. The works contained within this corpus do preserve an incredible bulk of informative knowledge, in the form of facts, methodological approaches, and sources cited. But they do so not because they aspire to function as passive archival writings, but because they seek to promote a creative reuse of their knowledge in new settings, and a remoulding of their knowledge for the purpose of launching new intellectual pursuits. Their readers are assigned an active role in this process, encouraged to engage with their contents by means of criticising, supplementing, expanding, adapting and reconfiguring them. It was perhaps this particular conception of didacticism that prevented such projects (with the exception, perhaps, of Pliny's *Natural History*) from reaching the monumentality of the Renaissance and modern encyclopaedia.

⁹⁸ See the introduction to this volume.

⁹⁹ See König and Whitmarsh (2007b).

7 | Artemidorus' *Oneirocritica* as fragmentary encyclopaedia

DANIEL HARRIS-McCOY

Introduction

Encyclopaedic texts make fascinating objects of study because they claim to provide a synoptic and authoritative picture of what we know. They give order to the vast and jumbled world of specialised scholarship by limiting and resolving its intricacies and debates into a single, comprehensible whole. As Fowler observes: 'In an encyclopaedia, the subject is "out there" in some sense in the noumenal or phenomenal world, and the author is engaged in either presenting discoveries about it or (much more rarely) making discoveries.'¹ In other words, encyclopaedias typically do not present anything new and untried. Rather, they offer a portable version of the sum of our knowledge. In doing so, they allege to understand and, in a sense, to reflect our understanding of knowledge itself.

The process of writing a complete and definitive account of knowledge is, however, inherently unstable and marked by paradox. In a brilliant article, Clark demonstrates that the encyclopaedic drive to totalise, eternalise and objectify knowledge is 'shadowed' by inevitable incompleteness, obsolescence and subjectivity.² In addition to simply compiling information, editors of encyclopaedic texts must therefore also convince their readers through appeals to intellect, ideology and aesthetics that their particular compilation is the best organised, the most complete. Encyclopaedias are contested space, where claims to knowledge are defended but, in certain cases, explicitly problematised due to the editor's recognition of the difficulties involved in composing a complete and authoritative body of knowledge.

This paper highlights the inherent arbitrariness and instability of encyclopaedic writing. The opening section offers a short survey of contemporary criticisms of the encyclopaedia in the literature, literary theory and encyclopaedias of the Enlightenment and post-Enlightenment. It also introduces the concept of the 'fragmentary encyclopaedia', an encyclopaedic text that is self-consciously aware of its own incompleteness. Such texts, through their self-criticism, both reveal the complexities of the encyclopaedic

enterprise and the frequently less-than-objective foundations of other instances of the form.

This section is followed by a longer analysis of an ancient self-critical encyclopaedic document, Artemidorus' *Oneirocritica*, a treatise on dream divination and catalogue of dream interpretations written in Greek in the late second century CE.³ The *Oneirocritica* is presented in encyclopaedic terms.⁴ It is the product of exhaustive bibliographic and empirical research and provides a massive catalogue of dreams and outcomes organised according to a set of universally relevant objects and life events. Due to the necessity of interpreting dreams according to their unique cultural and individual contexts, however, Artemidorus admits that the *Oneirocritica* cannot offer a truly complete account of dream interpretations. It can exist only as a fragment of an unattainable whole. Artemidorus' drive towards completeness and simultaneous recognition of his text's insufficiency has several effects on its structural and rhetorical composition. It also has implications which may be described as political. Specifically, Artemidorus' refusal to ride roughshod over the diversity of local cultural practices, by composing a lengthy but ultimately shallow text, resembles concerns found in other Greek authors writing during the Second Sophistic.⁵

³ The *Oneirocritica* itself provides most of our information about its author. He was a Lydian who identified in his works with both the cosmopolitan centre of Ephesus and the town of Daldis (more on this below). The most recent analysis of his date is provided by Bowersock (2004) 54–6, who concludes, based on references to historical figures mentioned in the text, that it was published during the late second or possibly early third century CE. The latest datable reference is to a runner and musician who participated in the first Eusebeian games, which Antoninus Pius instituted in 138 CE in honour of Hadrian, his father (1.26, 4.22). An approximate *terminus ante quem* is Galen's (129 to c. 216 CE) *In Hippocratis de victu acutorum*, which lists Artemidorus among a group of 'celebrated diviners' (K 15.444).

⁴ Among classical authors, Artemidorus has not commonly been regarded as an encyclopaedic writer, unlike, say, Varro, Celsus or Pliny. Several papers in this volume, however, encourage a more dynamic understanding of what an encyclopaedia or encyclopaedic text might be. Morgan in chapter 5, for example, argues that the wisdom collections of the Greek *sophoi* have an encyclopaedic quality insofar as they emphasise systematicity, comprehensiveness and authority and, presumably, these criteria could be extended to other texts.

⁵ Few scholars have looked at how information is arranged in the *Oneirocritica*, in spite of the growing number of studies on the organisation of knowledge in ancient technical works and their cultural contexts. The *Oneirocritica* has typically been studied in relation to the history of divination (e.g. Blum (1936) 60–71; Kessels (1969); Martin (1991)), its philosophical foundations (Blum (1936) 81–91) and, less often, its language and position within the Atticising movement of the period (Lesky (1966) 842; cf. Blum (1936) 23–51). Relatively recently, the *Oneirocritica* has been studied as a source of information on the social and, in particular, sexual and political mores of the Second Sophistic (Foucault (1990) 1–35; Winkler (1990) 17–44; Pomeroy (1991); Bowersock (2004)). Price (1986) does briefly discuss the rationale that underlies the organisation of the five books and provides a very interesting discussion, in particular, of why Artemidorus composed Book 3 (10, 31).

Contemporary criticism of the encyclopaedia

The promethean quality of knowledge, and the challenges involved in circumscribing it in writing, are major themes in literature, literary theory and in encyclopaedias themselves. By drawing on the relatively explicit criticisms of the encyclopaedic mode in the literature and theory of the Enlightenment and post-Enlightenment, I will attempt to demonstrate why some encyclopaedic texts of all ages are self-critical.⁶ It is due, in brief, to a trans-temporal discomfort relating to the acquisition of large amounts of knowledge rooted in social and philosophical considerations. Certain encyclopaedias participate in this discomfort and therefore are self-critical even as they compile ever greater bodies of information.

In fiction, parodies of the drive to compile and organise information are often directed at the social pretensions and epistemological difficulties involved in acquiring wide-learning. For example, in Rabelais' *Gargantua et Pantagruel* (1534–54), Gargantua's studies with the sophist Ponocrates (Lord of Drudgery) render him incapable of appreciating a meal or the beauties of nature except in reference to 'Pliny, Athenaeus, Dioscorides, Julius Pollux, Galen, Porphyry, Oppian, Polybius, Heliodorus, Aristotle, Aelian and others'.

A critique of the snobbery of encyclopaedic culture, and in particular its tendency to confuse book-learning and practical knowledge, can also be found in Flaubert's novel *Bouvard et Pécuchet* (1881), a tale of two Parisian copy-clerks who retire to the countryside to consume knowledge. The pair proceeds through each field of study. (Flaubert's novel is organised like a traditional encyclopaedia. Each chapter is devoted to a particular discipline or set of related disciplines.) Overly impressed by the intellectual gymnastics of their texts and interlocutors, Bouvard and Pécuchet insist on inflicting their findings on the surrounding populace, with predictably disastrous results.

Other criticisms are more abstract and philosophical in nature. In Borges' short story 'La biblioteca de Babel' (1941), all sense of purpose in the universe is related to the quest for a master book, a so-called 'catalogue of catalogues', and 'cipher and compendium of all the rest'. This quest will be fulfilled, according to a mystical sect, when someone locates 'a round

⁶ I refer the reader to West's longer survey and analysis of such texts in [chapter 23](#). Many of the authors discussed in this section appear in his paper as well, including Rabelais, Flaubert, Borges and van Ringelberg. And, while West does not discuss modern theoretical approaches to the encyclopaedia as explicitly as I do, he nevertheless identifies many of the same sources of encyclopaedic 'irony', that is, the subversion of the totalising project of the encyclopaedia without abandoning its goals of 'coherence, comprehensiveness, usefulness and universality'.

chamber containing a great book with a continuous back circling the walls of the room . . . that cyclical book is God (*Ese libro cíclico es Dios*).⁷ Borges' mystical, cyclical book is obviously meant to call to mind the encyclopaedia through its description and phonetic similarity (*libro cíclico/enciclopedia*). Like the encyclopaedia, the cyclical book is marked by its ability to contain an infinite body of knowledge and to give order to it within a finite textual space. Yet the cyclical book is a mere object of yearning, and paradoxical in nature. Even if found, its contents would be impossible to access. A circular book contains no opening.

Encyclopaedias themselves sometimes explicitly problematise the process of compiling knowledge. One category of encyclopaedia, theorised by Moser and catalogued by Arnar, readily acknowledges that their contents remain imperfect, either in terms of scope or organisation. Moser deems such works 'fragmentary encyclopaedias'.⁸ Examples he and Arnar provide include Sterck van Ringelberg's *Lucubrationes* (1541), which rounds out its chapters on the liberal arts with a catch-all section entitled 'Chaos' that includes, remarkably, the topics of poetry, Christ and militia; Novalis' *Das Allgemeine Brouillon* (1798–9), an unfinished collection of 1,151 'rough drafts' of ideas capable of endless recombination; and Nelson's *Perpetual Loose-Leaf Encyclopaedia* (1904), whose ring-binder construction allows for the insertion of updated or new articles. The unconventional formats of these documents arise from their recognition of the very instability of knowledge. It is not a stable, neatly categorised entity but ever-changing and elusive. Fragmentary encyclopaedias are thus iconoclastic and creative by nature. They tend to question dogmas and their ideological foundations. And, read politically, they sometimes reflect an attitude of resistance to dominant power structures insofar as they call into question the authorised version of knowledge.⁹

Historians of encyclopaedias frequently mark a decline in the confidence with which knowledge is recorded, beginning in the Renaissance. Clark states that 'from the Renaissance onward, this static notion of the encyclopaedia gives way to the more dynamic idea that, like the human mind, the encyclopaedia is in a self-conscious and direct relation to the world,

⁷ Borges (1962) 80. Cf. Moser (1981), who surveys Borges' interest in the complexities involved in the quest for total knowledge in his 'The Library of Babel', 'The Aleph', 'Tlön, Uqbar, Orbis Tertius', 'The Writing of the God', and 'The Garden of Parting Ways' as part of a larger analysis of the fragmentary encyclopaedia (112–16).

⁸ Moser (1981); Arnar (1990) 27.

⁹ For example, Harries argues in chapter 8 that Tribonian, who was responsible for the drafting of the emperor Justinian's *Encyclopaedia*, subverts the authorised account of Roman law by including 'right opinions' as well as the juristic controversies that surrounded them (pp. 195–6).

and must approach and interpret its subtle and elusive nature'.¹⁰ She goes on to cite Francis Bacon who, in the *Novum Organum* (1620), recognises the gap between the subtleties of nature and human understanding. Pierre Grimal, in his survey of Greek and Roman encyclopaedic texts, draws a similar distinction between modern and ancient texts. Whereas the modern editor can be nothing but '*un collectionneur de faits, un abrégiateur, et, parfois, un simple vulgarisateur*', ancient encyclopaedias sought to reflect particular systems of thought: '*Il se soucie moins d'exposer que de coordonner et, finalement, de découvrir le "secret du monde."*'¹¹

While the Renaissance and Enlightenment might mark a special level of encyclopaedic consciousness and critique, I believe that the concept of totalising texts that are nevertheless self-critical is present from the earliest periods onward. Indeed, taking a liberal view of what constitutes encyclopaedic composition, in his 'Catalogue of Ships', Homer the narrator protests that he is unable to list all the armies who fought at Troy and calls for divine support (*Iliad* 2.488–92). A human memory and voice are not sufficient instruments to relate such a vast quantity of information.¹²

This is due to the unstable nature of knowledge itself, as several theorists of the encyclopaedia have shown.¹³ Language, epistemology, time and ideology all hinder the encyclopaedia's idealistic goals. For instance: Eco sees the encyclopaedia as artificially organising information according to the taxonomic model of the 'Porphyrean tree'. According to his model, knowledge is labyrinthine, a centreless web in which all points of information are linked

¹⁰ Clark (1992) 99–100. Cf. Barthes (1987), who observes that, in contrast to the encyclopaedias prior to the Renaissance, which confidently structure their contents around an arbitrary vision of knowledge and the world, we now have self-conscious encyclopaedias of language (*encyclopédies de langage*), which explore the infinite variety of how, not what, we can say (93–5).

¹¹ Grimal (1966) 459–60.

¹² There seems to be something mystical and otherworldly about encyclopaedic knowledge, because it borders on omniscience. Harries observes in chapter 8 that the committee assigned to compile Justinian's *Encyclopaedia*, better known as the *Digest*, 'invoked the name of the Supreme Deity as the true inspiration and enabler of the project, which, the emperor admitted, was beyond the ability of mere mortals to achieve' (p. 179). More generally, world myth tends to stress the outsider status of omniscient beings, who break the corporeal, geographic or temporal restraints that are applied to normal people. In the Cook Islands the all-knowing god Tonga-iti is given the epithet Mata-rau or 'He of the two hundred eyes' (i.e. all-seeing). Sky-gods are often omniscient. Odin observes the doings of men from his throne Hlidskjalf high on Asgard. In the *Iliad*, the prophet Calchas is able to break the bonds of time, knowing the 'things that are, that are to be, and that have been before' (1.69–70).

¹³ Clark (1992) provides an outstanding survey of theoretical approaches to the encyclopaedia, which I rely upon here (95–7). For a more general but useful consideration of problems involved in defining the encyclopaedia, see Fowler (1997). On the encyclopaedia's elusive, unobtainable nature, see again West in chapter 23.

to every other point. A true representation of knowledge therefore cannot be contained within a static written text.¹⁴ Descombes concludes that the ubiquity of the encyclopaedic supplement is indicative of the inevitable obsolescence of knowledge over the passage of time.¹⁵ And Foucault notes that, while the encyclopaedia may promise everything worth knowing, it is actually a relatively restricted body of information, containing only the authorised version of knowledge.¹⁶

According to these theorists, every text that self-confidently proclaims its stability and completeness is, whether it knows it or not, hoodwinking its readers, for it elides the epistemological difficulties inherent in encyclopaedic composition. However, some texts that try to be complete, or at least as complete as possible, acknowledge that they are themselves incomplete or incoherent to some degree. An ancient example of such a text is Artemidorus' *Oneirocritica*. Like the later texts we have seen, Artemidorus is occasionally critical of the encyclopaedic mode. He asks in what sense is it possible for a text to be complete, and what kinds of knowledge stubbornly resist compilation. This self-critique is rooted in Artemidorus' theory of divination, and it is to this theory that I would now like to turn.

The infinite requirements of divination

The fundamental principle involved in the interpretation of dreams is a 'doctrine of similarities'. This doctrine is presented at various points but perhaps most clearly in Book 2 in the section on dreams of trees. Artemidorus writes: 'And, with respect to the remaining trees, it is necessary to form one's interpretations on the basis of the aforementioned examples, always associating similarities with their outcomes. For in fact the interpretation of dreams is nothing other than the juxtaposition of a similar feature' (καὶ γὰρ οὐδὲν ἄλλο ἐστὶν ὀνειροκρισία ἢ ὁμοίου παράθεσις, 2.25).¹⁷ One discovers a dream's outcome, for example, on the basis of some qualitative, aural, etymological, locative, proverbial, mythical or numerological association.¹⁸

¹⁴ Eco (1984) 81.

¹⁵ Descombes (1978) links the encyclopaedic supplement to the psycho-linguistic phenomenon of the 'supplement' as discussed by Derrida in *Of Grammatology*.

¹⁶ Foucault (1972) 126–31; cf. Foucault (1980). On Foucault's views on the association between knowledge and power in reference to classical texts, see König and Whitmarsh (2007b) 6–8.

¹⁷ All translations of the *Oneirocritica* are my own. For other instances of the doctrine of similarities see, for example, 1.21, 1.74, 2.12, 2.25, 2.41.

¹⁸ See Geer (1927) for an exhaustive list of the ways in which Artemidorus links dream-signs to outcomes.

This principle can be seen in action in the following interpretation of dreams of laurels. Artemidorus explains: ‘And a laurel signifies a rich wife due to its being an evergreen and one who is lovely due to its delightful nature’ (2.25). Shapely trees and desirable wives are linked here on the basis of an aesthetic resemblance.

However, Artemidorus complicates this doctrine by requiring a diviner also to consider the cultural and individual background of the dreamer. He proceeds gradually, first establishing a basic distinction between ‘common customs’ (κοινὰ ἔθη) and ‘particular customs’ (ἰδία ἔθη). Unlike the negative definitions of the common customs in Polybius, Philodemus and Aelius Theon, Artemidorus offers a definite list of what he considers them to be:¹⁹

To respect the gods and to honour them. For no culture lacks gods, just as there is none without a ruler, and each worships different gods but all religions are directed towards the same divine referent. To raise children, to yield to women and to engage in sexual intercourse with them, to be wakeful during the day, to sleep at night, to eat food, to cease from grieving, to live indoors and not in the open air. And so these are the common customs.

θεοὺς σέβεσθαι καὶ τιμᾶν· οὐδέν γάρ ἔθνος ἀνθρώπων ἄθεον ὥσπερ οὐδὲ ἀβασίλευ-
τον, ἄλλοι δὲ ἄλλους τιμῶσι θεοὺς, ἀλλ’ ἐπὶ τὸ αὐτὸ τὴν ἀναφορὰν ἔχουσι πάντες.
τέκνα τρέφειν, ἡττᾶσθαι γυναικῶν καὶ τῆς πρὸς αὐτὰς ὁμιλίας, ἐγρηγορέναι ἡμέρας,
καθεύδειν νύκτωρ, τροφαῖς χρῆσθαι, παύεσθαι κάμνοντας, διάγειν ἐν σκιᾷ, μὴ ὑπαι-
θρίους. ταῦτα μὲν οὖν κοινὰ ἔθη· (*Oneirocritica* 1.8)

However, as is clearly indicated by the μέν particle, Artemidorus’ explanation of the customs is not complete. He proceeds to introduce the ‘particular customs’ which serve as an umbrella concept for the variety of idiosyncratic practices that cultures and individuals participate in. Artemidorus underscores the enormous gulf between these two categories of knowledge and the relevance of that gulf to the would-be interpreter, who is required to find out both common and particular customs: ‘Moreover, the common customs differ greatly from personal customs. Unless one learns these, he will be deceived by them’ (Ἔτι καὶ τὰ κοινὰ ἔθη τῶν ἰδίων μακρῶ διέστηκεν. ἃ εἰ μή τις καταμάθοι, ἐξαπατηθήσεται ὑπ’ αὐτῶν, 1.8).

Artemidorus gradually refines the ‘particular customs’ to such an extent that when interpreting, the oneiromant must even take into account the

¹⁹ Polyb. 1.70, 4.67; Philod., *Peri Eusebeias* fr. 48.1374; Aelius Theon, *Progymnasmata* 121. These authors use the concept of common customs to highlight the unique badness of an action. The act is so awful, they say, that it violates an unspecified but universally recognised set of customs.

unique circumstances of the individual dreamer.²⁰ He does so in two moves. First, he introduces the previously unmentioned, but essentially synonymous, concept of the 'ethnic customs' (τὰ δὲ ἴδια καὶ ἔθνικα καλοῦμεν, 1.8). This reminds the reader to consider the widely varying practices that exist at the level of particular cultures. Artemidorus then provides a list of widely divergent cultural practices to demonstrate the relativity of what is considered normal. For instance, he points out that among the Thracians, the nobility get tattoos whereas among the Getae only the slaves receive them; among the Mossynes, public sexual intercourse is common whereas it is shameful everywhere else; and in Italy, people do not kill vultures (1.8).²¹ The list is capped by the general observation that

it is necessary to form one's judgement about all the other customs in similar fashion on a case-by-case basis, depending upon whether something is practised only among a certain people, because the customs that belong to one's native land are significant of good events, but foreign ones are significant of bad, unless one of the things present in the dream indicates an outcome that relates to somewhere else.

²⁰ The necessity of taking cultural and individual context into account in an interpretive process has been linked by Blum (1936) to certain schools of divination, for example, Favorinus' critique of astrology as described by Gellius. This critique is formed both on the basis of man's inability to comprehend the workings of the universe and, in particular, the inability of astrological systems to explain the idiosyncrasies of men: 'But how', said he, 'can it be believed that the fate and fortune foretold by the form and position of any one of the stars are fixed and attached to one particular individual, and that the same position of the stars is restored only after a long series of years . . . ?' (Gell., *NA* 14.1.21). Favorinus highlights the difficulties in subjecting individuals to the relatively vast and unwieldy system of astrology. More generally, this critique of a technical system of divination should be linked to the empiricist tradition in ancient medicine, which resisted theoretical approaches to diagnosis and therapy in favour of heavily descriptive accounts of diseases and their cures on the basis of actual experience (e.g. Celsus *Med.* preface 35). For further instances of this phenomenon, one might look generally to texts concerned with diagnosis or the reading of symptoms (medical and otherwise). Subjects include physiognomy (cf. Barton (1994) 95–132), medicine (e.g. Galen, *De sectis ad ingredientibus*, *On Medical Experience*, *Subfiguratio empirica*) and athletic training (cf. König (2005) 325–36 on Philostr., *Gymnasticus*). These texts highlight the complexities involved in interpretation partly in order to uphold the authority of the author and to undermine the claims of rivals to authoritative knowledge. On authority as an encyclopaedic trope, see Morgan in chapter 5.

²¹ White (1990) lists the evidence for these customs in earlier authors (70–1). On the Thracian nobility receiving tattoos, see Hdt. 5.6. An anonymous epigram from the *Palatine Anthology* states that Thracian women stained their tattooed arms with blood to commemorate the death of Orpheus (7.10, cf. Plut. *De sera* 12.577). Athenaeus states that the Scythian women tattooed the neighbouring Thracian women, who subsequently tattooed the rest of their bodies to mask this shame (12.524). There do not appear to be any references to Getae slaves receiving tattoos apart from the *Oneirocritica*. It is remarkable that Artemidorus does not mention that it was customary for Greek slaves to receive tattoos (e.g. Plut., *Nic.* 29.2.) On the sexual habits of the Mossynes, see Xen., *An.* 5.4.33–4 and Ap. Rhod., *Argon.* 2.1023–5. On the veneration of vultures in Roman and, indeed, Greek culture, see Apollod., *Bibl.* 1.9.12.

ομοίως δὲ καὶ περὶ τῶν ἄλλων ἐθῶν ἰδίᾳ δεῖ διαλαμβάνειν πάντων εἴ τι παρά τισι μόνοις φυλάσσεται, ὅτι τὰ μὲν ἐγχώρια ἀγαθῶν ἐστὶ σημεῖα, τὰ δὲ ξενικὰ κακῶν, πλὴν εἰ μή τι τῶν παρόντων τὴν ἀπόβασιν ἀλλαχόσε τρέποι. (*Oneirocritica* 1.8)

After insisting that the diviner be aware of the practices of particular cultures, Artemidorus instructs him to obtain information about the life of the individual dreamer:

And it is profitable, and not only profitable but necessary, for both the one observing the dream and for the one interpreting it, that the dream interpreter knows who the observer of the dream is and what he does for a living and the nature of his birth and what his financial status is and the condition of his body and his age

λυσιτελὲς δ' ἂν εἴη, οὐ μόνον δὲ λυσιτελὲς ἀλλὰ καὶ ἀναγκαῖον τῷ τ' ἰδόντι τὸν ὄνειρον καὶ τῷ ὑποκρινομένῳ, ἐπίστασθαι τὸν ὄνειροκρίτην τίς τέ ἐστιν ὁ ἰδὼν τὸν ὄνειρον καὶ ὃ τι πράσσει καὶ ὅπως γέγονε καὶ ὃ τι ἔχει κτῆμα καὶ ὅπως ἔχει σώματος καὶ ἥστυνος ἡλικίας γέγονε. (*Oneirocritica* 1.9, cf. 1.3)

Thus, a dream-interpreter must be both an anthropologist and counsellor of sorts, aware of both cultural practices and the circumstances of the dreamer.

The sheer quantity of information that is required to produce even one dream interpretation makes becoming an omniscient dream interpreter very difficult, for the reasons discussed above. At one level, this is used as advertising. Divination is a complex process and Artemidorus frequently reminds us that he became worthy of writing the *Oneirocritica* only after a lifetime of study and travel. However, the complexity of divination is also problematic for authors of treatises on the subject, even one as adept as Artemidorus. That is, because the amount of information required to interpret every conceivable dream in every conceivable context is theoretically infinite, the composition of a truly encyclopaedic catalogue of dream interpretations becomes impossible. That this is so, and Artemidorus' response to this problem, are addressed in the next two sections.

The *Oneirocritica* as fragmentary encyclopaedia

Books 1 and 2 of the *Oneirocritica* are presented in encyclopaedic terms in a number of ways.²² First, they are the product of exhaustive research.

²² I want to point out that Artemidorus also claims to have written the definitive theoretical treatise on dream-divination theory. He begins the theoretical section by noting that he must 'speak generally about certain fundamental concepts' (ἀναγκαῖον δὲ πρῶτον περὶ στοιχείων

Like other authors who advertise the comprehensiveness of their texts, Artemidorus tells us that he has read all extant sources on his subject in addition to conducting empirical research:²³ 'But there is no book on dream-interpretation which I have not acquired, expending much zeal in this regard, and I have also consorted for many years with the much-maligned diviners of the marketplace' (ἐγὼ δὲ τοῦτο μὲν οὐκ ἔστιν ὃ τι βιβλίον οὐκ ἐκτησάμην ὀνειροκριτικὸν πολλήν εἰς τοῦτο φιλοτιμίαν ἔχων, τοῦτο δὲ καὶ σφόδρα διαβεβλημένων τῶν ἐν ἀγορᾷ μάντεων . . . ἔτεσι πολλοῖς ὠμίλησα, 1 preface).

Artemidorus highlights the broad scope of the *Oneirocritica* by highlighting the hyperspecialisation of his predecessors.²⁴ He cites, for example, Aristander of Telmessus' handling of dreams of teeth (1.31) and Demetrius of Phaleron's five-book treatise on the dreams and medical cures furnished by the god Serapis (2.44).²⁵ By mentioning these and similar authors within the catalogue, he is able both to demonstrate his mastery of the bibliography on dreams and to show how his own text incorporates these relatively specialised works into a comprehensive presentation. This reflects the cumulative nature of encyclopaedias, which resolve disparate information into a unified whole.

Unlike his predecessors, Artemidorus organises Books 1 and 2 according to a general, universally relevant set of phenomena: the common customs and, in particular, the events of the human life cycle and daily round.²⁶

τινῶν κοινονικῶς εἰπεῖν) of his subject (preface 1) and proceeds to carefully divide and treat the different categories of dream and divinatory theory using taxonomic methods. In the theoretical treatise in Book 1, following his discussion of the various categories of dreams, he concludes: 'And so these things have been sufficiently addressed to fill out anything that has been insufficiently discussed by the old-time writers' (1.3). His treatise on dreams and their interpretations is thus both a summary of previous scholarship and its culmination.

²³ Pliny the Elder advertises the encyclopaedic scope of his monumental *Natural History* in terms of the quantity of his sources: 'In thirty-six books I have included 20,000 items, worthy of attention – since, as Piso says, it is right to make use of storehouses, not books – by reading 2,000 volumes, few of which even the earnest have acquired due to the abstruseness of the material, taken from 100 authors' (preface 17, cf. Varro *Rust.* 1.1, Vitruvius *De arch.* 7 preface 10–18).

²⁴ In chapter 23, West notes a similar tendency in encyclopaedic texts towards ever greater inclusiveness.

²⁵ Del Corno (1969) catalogues the *testimonia*, many from the *Oneirocritica*, for dream diviners whose texts are now lost.

²⁶ The table of contents is presented as follows: 'we will begin first of all from birth, then †† being raised, then about the body and the parts of the body – those which are added to it or subtracted from it and increase or decrease in size and change into a different form or substance – then about the teaching of all kinds of arts and labours and pursuits, then about youth, about exercises [according to type], about contests, about the bath and every type of bathing, about every food, liquid and solid, about perfume and wreaths, about [sexual]

Just prior to listing the table of contents, he declares: ‘We will begin, not as the old-time authors did, from the gods, even if we might seem to blaspheme, but will begin as is required by sequence by looking first to birth’ (οὐχ ὥσπερ οἱ παλαιοὶ ἀπὸ θεῶν ἀρξόμεθα, καὶν ἀσεβεῖν τινὶ δοκῶμεν, ἀλλὰ πρὸς τὸ ἀναγκαῖον τῆς ἀκολουθίας ἀποβλέποντες ἀρξόμεθα πρῶτον ἀπὸ τοῦ γεννᾶσθαι, 1.10).²⁷ In the quoted passage, Artemidorus says that his catalogue is organised according to a set of ‘compulsory’, ‘fixed’ or, perhaps, ‘natural’ events. And its contents are indeed either necessarily universal (e.g. body parts, climate, death) or included in the list of common customs and therefore common to all people regardless of origin. The only exception is seeking shelter, which is a common custom but not listed in the table of contents. However, this, too, can be found within the actual catalogue of dream interpretations (2.10).

Artemidorus declares that the *Oneirocritica* is complete because it contains dreams that relate to the common customs and other universal phenomena. We see this in the preface to Book 2, which refers to the inclusion of all common features of a human life:

In the book prior to this one, Cassius Maximus, after providing systematic guidance and instruction in how one must interpret dreams and a declaration of the items that would be written down in both books, I crafted a discourse about everything, both that which is common to all mankind and that which is useful . . .

Ἐν μὲν τῇ πρὸ ταύτης βίβλῳ, Κάσσιε Μάξιμε, μετὰ τὰς τεχνικὰς ὑποθήκας καὶ τὴν τοῦ ὅπως δεῖ κρίνειν τοὺς ὀνείρους διδασκαλίαν καὶ ἐπαγγελίαν τῶν ἐν ἀμφοτέραις ταῖς βίβλοις γραφησομένων περὶ πάντων τῶν περὶ ἄνθρωπον κοινῶν τε καὶ ἐν χρήσει ὄντων ἐπισησάμην τὸν λόγον. (*Oneirocritica*, preface to Book 2)

intercourse, about sleep. The first book will encompass these things. And the second book †† about waking, greeting, every adornment, male and female, climate and the things about the weather, about hunting, about fishing, about sailing, about farming, about the administration of justice, civic government and benefactions, military service, honouring the gods and the gods themselves, about death. And, if there is anything else, the discourse will mention it as it goes along’ (1.10).

²⁷ White (1990) translates ἀναγκαῖον as ‘natural’ whereas I have translated it more literally as ‘required’. Both get at the idea of sequence of events that, due to their fixed character, are universal. The specific use of the life-cycle to express completeness is found elsewhere in antiquity. In Quintilian’s *Institutio oratoria*, it is used to demonstrate the comprehensiveness of the training in oratory provided therein: ‘I shall proceed exactly as if a child were put into my hands to be educated as an orator, and shall plan his studies from infancy (*nec aliter quam si mihi tradatur educandus orator studia eius formare ab infantia incipiam*, *Inst.* 1 preface 5). Quintilian goes on to state that he will carry out the orator’s training from the cradle (*ab incunabilis*, *Inst.* 1 preface 6), and spends much of Book 1 discussing the early education of the orator. His text is bookended with a reference to birth (*Igitur nato filio*, *Inst.* 1.1.1) in Book 1 and a portrait of the fully mature orator in Book 12 (*Sit ergo nobis orator quem constituimus is qui*, 12.1.1).

And a similar statement appears in the preface to Book 4, which looks back on Artemidorus' intentions for Books 1 and 2:

And I collected each dream that is capable of being observed and each that is useful and used an arrangement and sequence akin to a human life, including each of our activities from birth to death and the relationship each item could hold towards any other and how it could come to pass... And I thought my treatise, encapsulated within two books, was sufficient.

συναγαγὼν ἕκαστα τῶν ὁρᾶσθαι δυναμένων καὶ ἐν χρήσει ὄντων ἐνυπνίων, τάξει τινὶ καὶ ἀκολουθίᾳ χρησάμενος ὁμοίᾳ βίῳ ἀνθρωπίνῳ, ἀπὸ γενέσεως ἄχρι θανάτου καθ' ἕκαστον τῶν πραττομένων ἐμπεριλαβὼν καὶ πρὸς ὃ τι τὴν ἀναφορὰν ἕκαστον ἔχειν καὶ εἰς ὃ τι ἀποβαίνειν δύναται... καὶ ἐδόκουν ἀποχρώντως ἔχειν τὴν πραγματείαν δυσὶ περιωρισμένην βιβλίοις. (*Oneirocritica*, preface to Book 4)

In both cases, Artemidorus claims that in Books 1 and 2 he has provided a body of dream interpretations that is complete either because it encapsulates all dreams that are common to all people (περὶ πάντων τῶν περὶ ἀνθρώπων κοινῶν) or because it is organised around the natural and universal sequence of the human life cycle (ἀπὸ γενέσεως ἄχρι θανάτου). These principles of organisation are attractive to an author who is seeking to write an encyclopaedic compendium. As we have seen in the discussion of the κοινὰ ἔθη, Artemidorus recognises that the common customs are universal yet also crucially limited in number. Using them as the organisational basis for the *Oneirocritica*, he is able to compose a document that is, in a sense, complete and relevant to all yet not infinite in scope.

The encyclopaedic quality of the organisational scheme of the *Oneirocritica* is also expressed metaphorically.²⁸ Specifically, Books 1 and 2 are compared to a body. This occurs in the preface to Book 3 where, ironically, Artemidorus admits that a supplement is needed, but he refuses to revise the structure of Books 1 and 2 because to do so 'would be like an addition to a healthy and gorgeous body' (ὥσπερ ὑγιεῖ σῶματι καὶ εὐμόρφῳ προσπλάκέν τι). The body is an apt metaphor for these books for they are organised around a set of images or practices that, like the body itself, are innately human rather than based in culture. Furthermore, as is well known, the body is frequently used in ancient compilatory texts to express the

²⁸ For an additional encyclopaedic metaphor, see Artemidorus' description of the contents of Books 1 and 2 as a 'subject marked by a boundary in two books' (τὴν πραγματείαν δυσὶ περιωρισμένην βιβλίοις, preface 3). This suggests that they are circumscribed by a border, further emphasising the closure of the text. On the issue of 'closure' and, in particular, the tension between convincing resolution and lack thereof in literary texts in the Greco-Roman world, see Roberts *et al.* (1997). For an illuminating discussion of the tropes that characterise encyclopaedic writing including *horismus* or 'definition' see West p. 489 in [chapter 23](#).

coherence and completeness of their contents.²⁹ Artemidorus is thus employing the imagery used by encyclopaedic authors such as Vitruvius, Frontinus, Columella and others.

In one sense, then, Artemidorus regards the catalogue in Books 1 and 2 as complete because it is organised according to a limited set of universal life events, the ‘common customs’ (κοινὰ ἔθη). Nevertheless, he also recognises that his text is incapable of encapsulating the complete range of cultural and individual contexts pertaining to the ‘particular’ (ἴδια) or ‘ethnic customs’ (ἐθνικὰ ἔθη) in which all dreams inevitably occur and thus cannot serve as a truly self-sufficient, encyclopaedic document.³⁰ This can be seen in Book 4, where manuals of dream divination are deemed insufficient because they are incapable of reflecting all of the ‘particular customs’. Manuals must, Artemidorus informs us, be supplemented by the reader himself who, unlike a static text, is able to increase his knowledge and respond to unexpected situations. In this passage, in particular, he recommends that the reader put down his text and travel, which will provide knowledge of local practices:

And if you do not know the local customs and the particularities of places, learn them. And, most of all, travel abroad and reading will give you a grasp of these things. For books on dream interpretation alone are not sufficient to assist you but, in fact, other material is necessary.

Ἐθὴ δὲ τὰ τοπικὰ καὶ τῶν τόπων τὸ ἴδιον εἰ μὴ ἐπίστασαι, πυνθάνου. ἀποδημίαι δὲ καὶ ἀναγνώσεις ἔξιν σοι περιποιήσουσι τούτων μάλιστα· οὐ γὰρ τὰ ὀνειροκριτικὰ μόνον βιβλία ἰκανὰ ἐστὶν ὡφελεῖν ἀλλὰ καὶ ἡ ἄλλη ὕλη. (*Oneirocritica* 4.4)

²⁹ The term *corpus* is frequently used by Latin authors to indicate a unified collection or ‘body’ of content. Ancient encyclopaedic authors often metaphorically connect the corpus of literature and the corporeal body in a self-aware manner (see McEwen (2003) 8–10 for an overview). One charming example can be found in Cicero’s *De inventione*, which tells the story of the painter Zeuxis. Responding to a commission by the citizens of Croton, Zeuxis painted several panels inside a temple of Juno, including a portrait of Helen. Zeuxis was able to capture Helen’s ideal beauty by gathering the most attractive Crotonian maidens and creating a composite image of their loveliest parts: arms, legs, breasts, etc. Cicero relates this story to demonstrate his method of composing his rhetorical textbook by selecting the best elements from earlier works on the subject and uniting them into a well-formed whole. Bodily metaphors are often used to express coherence and completeness by authors of texts with encyclopaedic aspirations, e.g. Vitruvius, *De arch.* 2.1.8, 6 preface 7, 9.8.15, 10.16.12; Columella, *Rust.* 1.1.14, 5 preface 5, 7 preface 10.14, 10 preface 4; Seneca, *Dial.* 9.9.6, *Ep.* 84.2; Cassiod., *Var.* preface 1; Quintilian, *Inst.* 4 preface 7, 4.1.77; Pliny, *Ep.* 2.10.3; Suet., *Gramm.* 6, cf. Horace, *Ars p.* 1–5.

³⁰ A different approach might point out that didactic works cannot actually teach all knowledge requisite for a given task or at least are incapable of teaching practical knowledge. For example, Vitruvius distinguishes between theoretical and practical knowledge (*fabrica et ratiocinatio*, 1.1.1) and states that, in the *De architectura*, he will provide theoretical knowledge only: *Namque his voluminibus aperui omnes disciplinae rationes*, 1 preface 3). For the view that many technical manuals are not actually practical in their orientation, but rather are concerned with conducting experiments in the ordering of knowledge, see König and Whitmarsh (2007b).

The reference to 'the peculiarities of each place' (τῶν τόπων τὸ ἴδιον) and the 'local customs' (ἔθη . . . τοπικά) in this passage clearly recalls the earlier discussion of the need to take cultural context into account and, specifically, the concept of the individual customs or 'particular customs' (ἴδια ἔθη). These individual customs, the wildly varying norms of different locales, cannot be catalogued fully within the finite space of a text but must be learned by the interpreter. This point is made repeatedly throughout the *Oneirocritica*. For example, in a passage from Book 1, Artemidorus instructs his reader to avoid passively relying on catalogic texts (1.12):³¹

For these reasons, I say that it is necessary that the dream-interpreter prepare himself from his own resources and make use of his innate intelligence and not be content with books alone, since whoever thinks that he will be sufficiently competent relying on doctrine without using his natural intelligence will be incomplete and imperfect, and will continue down this path all the more, the more he clings to this belief. For, in fact, erring from the beginning yields ever greater error.

ὅθεν φημὶ δεῖν οἰκοθεν παρεσκευάσθαι καὶ οἰκεία συνέσει χρῆσθαι τὸν ὄνειροκρίτην καὶ μὴ μόνον τοῖς βιβλίοις ἐπανεχεῖν, ἐπεὶ ὅστις γε τέχνη οἶται ἄνευ φύσεως ἐντελὴς ἔσεσθαι, ἀτελὴς καὶ ἀπέραντος, τοσούτῳ μᾶλλον ὅσῳ πλείονα ἕξιν ἔχει, διατελέσει· καὶ γὰρ τὸ ἀπ' ἀρχῆς πεπλανῆσθαι ἐπὶ πλεόν τὴν πλάνην παρέχει. (*Oneirocritica* 1.12)

And Artemidorus takes his own lesson to heart. In the autobiographical portions of the text, he recalls that he became a competent dream diviner in part through books, but gives greatest emphasis to his travels throughout the Mediterranean. This is apparent in a passage from the preface to Book 1: 'And in Greece, in its cities and festivals, and in Asia and in Italy and in the largest and most populous of the islands, I have patiently listened to old dreams and their outcomes.'

Finally, within the catalogue itself, Artemidorus often tells his reader to supplement the text when a group of interpretations begins to grow too long and therefore threatens the closure of the text. He cites the doctrine of similarities, instructing the reader to interpret other, unwritten dreams on the basis of some analogy between their features and their outcome. For example, at the end of the chapter on household items, he concludes: 'And it would take a long time to speak about the other household items, and these

³¹ Cf. the preface to Book 5, where Artemidorus reiterates the experience he has gained through travel and advises his son to use the newly published book of examples of historical dream-interpretations actively in order to gain greater 'experience and practice' (τριβῆς τε καὶ γυμνασίας). Note the physicality of his word choices. Book 5 is to be used, literally, for 'training' purposes.

items request that those who chance upon these books also employ additional skill, summoning something from within themselves by using their critical faculty' (περὶ δὲ τῶν ἄλλων σκευῶν μακρὸν ἂν εἴη λέγειν καὶ ταῦτα ἀπαιτοῦντα παρὰ τῶν ἐντυγχανόντων τοῖς βιβλίοις τὸ μὴ ἀβασανίστως ἀναγνόντας παρ' αὐτῶν τι προσφιλοτεχνεῖν 1.74).³²

In short, as a written document, the *Oneirocritica* can only include so much data. The text achieves encyclopaedic status insofar as its contents encompass a finite set of universal items and activities. However, when faced with detailing the myriad content and contexts of dreams and dreamers, it comes up short.

Effects on composition

In addition to the numerous explicit reminders to the reader that he must actively supplement the text, the inevitable incompleteness of the *Oneirocritica* due to the need to interpret dreams in context has several effects on its composition, which I now want to detail.

In Books 1 and 2, Artemidorus responds to the requirement that a dream's context be taken into account by frequently listing alternative interpretations of dreams based on different potential dreamers. For example, in the section on adulterated wines, he states that 'And to drink mead and honeyed quince wine and hydromel and myrtle wine and every variety of prepared wine, while good for the wealthy due to its luxuriousness, is grievous for poor men' (1.66). Here the reader is given two possible interpretations of the same dream based on the financial status of the dreamer. Pomeroy has studied the sociology of potential dreamers included in the *Oneirocritica* and concludes that, over the course of the treatise, a broad potential clientele is adduced including men and women of various social orders ranging from nobility to slaves. This is partly practical. Many dreams are interpreted in terms of a basic set of physical, economic and social factors – age, sex, income, etc. – which would have been applicable to a large potential clientele.³³ But the inclusion of alternative interpretations also functions as a warning to the reader. In our example, a dream of drinking adulterated wine has either a very positive or negative outcome depending on whether the dreamer is rich or poor. Because the possibility for error is considerable, this dream and others remind the would-be interpreter that he must not rely passively on

³² Cf. Artemidorus' encouragement to interpret independently in the sections on dreams of hair transforming into various materials, 1.21; dreams of trees, 2.25; and many others.

³³ Pomeroy (1991).

the interpretations provided by the text but rather must take context into account.

Artemidorus offers an additional reminder of the extent to which culture impacts on interpretations of natural events by recasting at least one 'common' life event in 'particular' or cultural terms. As we have seen, in his introduction to the table of contents, Artemidorus declares that he will proceed according to the 'compulsory' or 'natural' sequence of a human life (πρὸς τὸ ἀναγκαῖον τῆς ἀκολουθίας, 1.10). He includes youth (he will speak περὶ ἐφηβείας) among other natural events such as birth, intercourse, sleep and death.³⁴ But, in the catalogue itself, it immediately becomes clear that he is not discussing 'youth' as a natural phase of life but rather the specific customs and rituals of the *ephebeia* (1.54). A few examples will suffice. He notes how only the free are eligible to participate; that it is a year-long process but, as he points out, up to three in some locations; that during this period one must remain in one's native land; that a cloak (χλαμύς) is given and marriage follows; and that the ephebe must keep his right hand wrapped beneath his cloak.

This presentation of the life of a youth in the catalogue is slightly jarring when read in contrast to its appearance in the table of contents. Artemidorus first suggests that he will treat youth as a biological phase but then interprets dreams relating to youth in cultural terms. The choice of youth as the section in which to make this point is notable. By the Roman period, the military component of the *ephebeia* had decreased (but did not disappear) and training in rhetoric, philosophy and athletics became more prominent. Perhaps for this reason, the *ephebeia* seems to have played an important role in the formation of the cultural identity of Greeks in the Roman world (see, for example, Strabo's description of the *ephebeia*'s role in the preservation of cultural memory amongst Greek Neapolitans, 5.4.7). Given the importance of the institution, the section on dreams of the *ephebeia* is an ideal moment for Artemidorus to show the dominating role of cultural institutions even amidst biological events. The period of 'youth', as his readers would have been aware, is not just a life phase, but one suffused with cultural practices and meanings, and should be interpreted as such in divination.

Despite these strategies, Books 1 and 2 are declared insufficient and two supplements are published (Book 3 and, later, Books 4 and 5). These extra books respond to the failings of Books 1 and 2 in different ways. Book 3

³⁴ The lexica treat this as a time of life (e.g. *Souda* s.v. ἐφηβεία: ἡ δὲ ἐφηβεία κανὼν ἦν ὀρθοῦ βίου καὶ ὑγιονῆς), as does Diog. Laert. 10.4.

simply offers a greater quantity of dream interpretations. We can see this from Artemidorus' reflections on the composition of Book 3: 'Yet thereafter certain things were discovered that had evaded my treatise – small things and not worthy of great concern, but nevertheless found wanting by those who examine everything closely and attempt to leave nothing untested in their investigations' (πραγματείαν ἡύρισκετο, μικρὰ μὲν καὶ οὐ πολλῆς ἄξια φροντίδος, ὅμως δὲ ἐπιζητούμενα ὑπὸ τῶν ὀνυχιζόντων πάντα καὶ μηδὲν ἄβασάνιστον εὕρισκιν πειρωμένων, 4 preface). The publication of this new book does not make the *Oneirocritica* complete in a strict sense, however, but rather helps establish it as the most perfect volume available on the subject by discouraging other authors from publishing on that same subject. This is clear from Artemidorus' statement in Book 3 that he published the missing material 'so that no one might sneak or creep upon an excuse to compose a work of this sort' (ὥς ἂν μὴ τις ἀνθρώπων πάροδον καὶ ἐπιβάθραν τοῦ συγγράφειν τι τοιοῦτον ἐφεύρη, 3 preface).³⁵

The publication of Book 3 therefore grants the *Oneirocritica* a sort of *de facto* encyclopaedic status insofar as it will be very difficult to surpass the quantity of interpretations Artemidorus has gathered. Nevertheless, despite the increased quantity of interpretations, Book 3 cannot solve the more basic problem, that a finite text cannot encapsulate the infinite varieties of contexts in which dreams occur, no matter how many supplements it may be given. Books 4 and 5 therefore fundamentally alter how their readers interact with their contents to guarantee the proper use of the catalogue.

In Books 1 to 3, dream interpretations are typically stated in general terms. For example, in Book 1, Artemidorus states that dreams of 'preserved foods and all salted meats [and fish] signify delays and deferrals in the matters at hand' (1.71). This might give the impression, as Artemidorus fears, that every dream of pickled and salted fish will have this result regardless of context. In Book 4 and, especially Book 5, however, dreams are presented as historical events. For example, Artemidorus records a dream in which a man with a sick sister dreamt of eating seven black figs and seven days later the sister died (4.35). And, in another dream, 'A certain man imagined that he had genitals made of iron. He had a son who killed him. For in fact iron is destroyed by the rust arising from itself' (5.15). Artemidorus

³⁵ Artemidorus also appears concerned that, if he organised Book 3 systematically, it would conflict with the organisational principle of Books 1 and 2. Instead, Book 3 provides further dreams and interpretations compiled at random (lit. 'separately compiling, one-by-one, each of the things left out sporadically and not <in> organised chapters (ἰδίᾳ καὶ κατὰ μόνας ἕκαστον τῶν παραλειμμένων σποράδην καὶ <εἰς> οὐ συνημμένα κεφάλαια συναγαγών, preface 3)). The systematic encyclopaedia here devolves into a miscellany.

summarises this change: 'For I have proposed to write a composition that is nothing other than a guarantee of quality, being grounded in experience, and also is an *aid*' (οὐδέν γὰρ ἄλλο ἢ τὴν ἀπὸ τῆς πείρας πίστιν ἅμα καὶ ὠφέλειαν συναγαγεῖν προεθέμην, 5 preface). In other words, he is saying that, in Books 4 and 5, he is providing a catalogue of real dreams with only one context and outcome. This is made additionally clear by his movement from the present to the past tense, which signals the historical quality of these dreams.

The rationale behind Artemidorus' inclusion of actual dreams in Books 4 and 5 is, I think, similar to the rationale behind his inclusion of several possible dreamers and dream-contexts in Books 1 to 3. By presenting a dream in a particular context with a particular outcome, he is reinforcing his thesis that dreams must be interpreted on a case-by-case basis rather than as part of a totalising system. The reader no longer has any excuse to rely passively on what the treatise tells him. He can only use it actively and intelligently, relying on the historical dreams it contains as guides for how other dreams might turn out.

In publishing Books 4 and 5, Artemidorus also rededicates the treatise to his son and instructs him not to circulate the text, thus shifting from a public to a private audience: '[Keep] in mind that this book has been addressed to you, so that you yourself will be able to use it and not, by making copies, share it with the *hoi polloi*' (4 preface). Artemidorus does this, in part, to avoid further criticism from ill-intentioned readers, which he takes personally. However, the shift from a public to a private readership likewise reflects his awareness of the irresponsibility of his previous readership. As the theoretical sole reader of the text, Artemidorus Junior can defend against charges of incompleteness by stating that its readers simply did not read correctly, as we see from Artemidorus' instructions: 'And so, first, to those saying the explanation has not been spelled out in every case, you will rightly say the words from the preface to the first book: "This point is so obvious that an explanation of it should be regarded as superfluous."' (Πρὸς μὲν οὖν τοὺς μὴ πάντα ἡτιολογήσθαι λέγοντας ὀρθῶς ἐρεῖς τὸ ἐκ τοῦ προοιμίου τοῦ πρώτου βιβλίου ῥητόν, πλὴν εἰ μὴ τοῦτο οὕτω σαφὲς εἴη, ὥς περιττὴν ἡγεῖσθαι τὴν περὶ αὐτοῦ ἐξήγησιν, 4 preface).

This reflects Artemidorus' wariness in the first books that the text will be passively relied upon as a static key to dream interpretations. It is not that the text is incomplete due to negligence. It is simply that no text can be complete, and all must be supplemented by the reader. Indeed, he goes on in the preface to cite the doctrine of similarities, and complains that those who believe something has been omitted need only interpret using

this principle: ‘And to those who claim that not everything has been worked out fully and that certain things were left out, you will reply that some items which were similar to certain items, because they were obvious, were left out or not fully worked out . . . [having] the same logic’ (πρὸς δὲ τοὺς μὴ πάντα ἐξεργάσθαι λέγοντας καὶ τοὺς τινα παραλελειφθαι ἐρεῖς ὅτι ἑνὶά τισιν ὅμοια ὄντα ὡς εὖ γνωστα παραλείπεται ἢ οὐκ ἐξεργασται . . . τὸν αὐτὸν ἔχουσι λόγον). In short, the *Oneirocritica* is complete insofar as it embraces a wide range of common human experiences. To become truly encyclopaedic it must work in tandem with an active reader, who will use his knowledge of the cultural and individual contexts of dreams to supplement the text and thereby to complete it. Through the reader, the fragment will become whole.

Artemidorus, ethnic identity and the Second Sophistic

I want to close with a discussion of Artemidorus’ treatment of local culture and identities in the *Oneirocritica* in the context of the Second Sophistic, a period notable in part for the varying responses of Greek authors to their Roman rulers. Bowersock has catalogued references to Rome in the *Oneirocritica*.³⁶ The text is certainly aware of the extent of Roman power, which is global in its scope. For example, in a dream of flying, it equates the emperor with the gods: ‘For just as the sky is the home of the gods, Italy is the home of kings’ (2.68). According to this interpretation, the sky itself is an object of global embrace (Artemidorus notes that the sky is visible to all as part of this interpretation) and also connected to the power of the gods and the global sweep of the Roman empire.

Although a generalisation, globalising evaluations of culture tend to show up in Latin encyclopaedic texts. Authors like Varro, Vitruvius or Pliny, entrenched in Roman political culture, take an evaluative view towards cultural practices and subjugate individual places and identities within a synoptic, global whole. Varro’s *De re rustica* opens with the players gazing at a world map in the Temple of Tellus and praising Rome’s superior virtues (1.2). Vitruvius says that the physical and mental characteristics of various populations can be calculated mathematically according to their latitudinal position, with Rome’s moderate location a guarantee of its superiority (6.1.7). And, in the *Natural History*, Pliny establishes a hub-and-spoke vision of the world, with geographic places consistently related back to the

³⁶ Bowersock (2004).

central and dominant position of Rome.³⁷ In each case, the superior status of one culture, Rome, is upheld.

Though he is hardly a revolutionary, Artemidorus seems eager to preserve the idiosyncrasies of local culture in the face of global Roman influence. He does so in at least two ways: by praising the homeland as a crucial source of identity and disparaging migration assimilation and, second, by presenting alternative perspectives on seemingly normative views.

In the catalogue, a dichotomy exists between foreign and local and their respective values. We have seen that diviners must become delocalised figures, gaining knowledge of a range of practices through travel. But, in a period marked by the possibility of wide mobility, Artemidorus regards the homeland (πατρίς) positively and as an essential source of identity and, although he highlights his lifetime of travel and cultural immersion, nonetheless he associates travel (ἀποδημία or ξενιτεία) with unhappiness.³⁸ Emigration is typically presented in negative terms. Artemidorus observes generally, 'Moreover, of cities, it is better to see those that are more familiar than others – for example, one's fatherland or cities in which one has spent time and had good fortune. But to observe ones that are not familiar or to which one is unaccustomed is less good' (Ἔτι τῶν πόλεων τὰς οἰκειοτέρας ἄμεινον βλέπειν ἢ τὰς ἄλλας, οἷον πατρίδας ἢ ἐν αἷς τις διέτριψεν εὐτυχῶς· τὰς δὲ μὴ οἰκείας ἢ μὴ συνήθεις βλέπειν ἥττον ἀγαθόν, 4.60, cf. 2.68). The discussion of dreams about the navel (ὀμφαλός) concludes with the observation that it (the navel) signifies one's 'fatherland, out of which one is generated and comes into being, just as from the navel' (τὴν πατρίδα σημαίνει, ἧς ἐξέφυ τις καὶ ἐξεγένετο, ὥσπερ καὶ τοῦ ὀμφαλοῦ, 1.43, cf. 5.3). Here, one's homeland, the physical place of one's birth, thus takes on the metaphorical role of a parent. And, conversely, when one dreams of a cruel stepfather or stepmother, it should be taken as a sign of impending foreign travel, he explains, because one's homeland, like a true mother, is a source of nourishment and protection. A foreign land, like a stepmother, can never really cherish a non-native son (3.26).

³⁷ Cf. Pliny the Elder's paean to Rome in the *Natural History* (37.201–5). On the pro-imperialist views of Vitruvius and Pliny and their connection to encyclopaedic writing see, especially, McEwen (2003); Murphy (2004); and Carey (2003).

³⁸ For a detailed discussion of the 'meanings' of travel in Artemidorus, see Harris-McCoy (2009). On ἀποδημία as a marker of alienation and the various meanings of wandering and exile in Greek antiquity, see Montiglio (2005) 2–3. The dynamics of being removed from one's homeland in antiquity are complex. Montiglio contrasts the theme of wandering for Apollonius of Tyana and the Cynics: 'In sum, Philostratus depicts Apollonius' movements as wandering only to signify their godlike elusiveness, ubiquity, and effortless freedom. Cynic wanderers are also endowed with a divine aura, but their superior judgement cannot be separated from their practice of hardship' (220).

Artemidorus encourages individuals to preserve their cultural practices and avoid adopting foreign or cosmopolitan identities. In the catalogue, he chides certain Greeks for engaging in Roman pursuits, as we see from his recollection that a Greek dreamed of being beheaded, and consequently obtained Roman citizenship: ‘in this way, he was deprived of his former name and status’ (οὕτως ἀφῆρέθη τοῦ προτέρου ὀνόματός τε καὶ ἀξιώματος, 1.35). Here, political or personal gain is accompanied by loss of reputation and name.³⁹ The fundamental incompatibility of Greece and Rome is later presented in terms of inter-cultural marriage. A doctor dreamed that he said to someone, ‘Since you are Roman, do not marry a Greek woman.’ When he woke up, he got married anyway and was miserable (4.33)!

And this localist outlook is also apparent in Artemidorus’ autobiography at the end of Book 3, where he discusses his city of origin:

And do not be surprised at the authorship, since it has been inscribed ‘Artemidorus of Daldis’ and not ‘of Ephesus’, as were many of the books I wrought on other subjects. For it has come to pass that Ephesus is both famous in and of itself and has acquired both many and notable heralds of her fame. But Daldis, a hamlet in Lydia and not very notable due to its not having acquired such men has remained unknown up to our time. For this reason I offer these books as a reward for my upbringing to my fatherland on my mother’s side.

τὴν δὲ ἐπιγραφὴν μὴ θαυμάσης, διότι Ἀρτεμιδώρου Δαλδιανοῦ καὶ οὐχὶ Ἐφεσίου ἐπιγέγραπται, ὥσπερ πολλὰ τῶν ἤδη εἰς ἄλλας πραγματείας πεποιημένων μοι βιβλίων· τὴν μὲν γὰρ Ἐφεσον συμβέβηκε καὶ αὐτὴν δι’ ἐαυτῆς περιώνυμον εἶναι καὶ πολλῶν καὶ ἀξιολόγων κηρύκων τετυχηκέναι, Δάλδιν δὲ πόλιν Λυδίας καὶ οὐ σφόδρα ἐλλογίμονα διὰ τὸ μὴ τοιούτων ἀνδρῶν τετυχηκέναι ἄγνωστον τὸ μέχρι εἰς ἡμᾶς μεμένηκε. διὸ θρεπτήρια οὕση μοι πατρίδι πρὸς μητρὸς ταῦτα ἀποδίδωμι αὐτῇ. (*Oneirocritica* 3.66)

In this section, Artemidorus glorifies a small place – it is remarkable how he describes Daldis as a ‘town of little repute’ – in contrast to his previous practice of identifying with Ephesus. This statement, conspicuously made, corresponds to Artemidorus’ emphasis on acknowledging one’s context both in interpreting dreams and, it seems, in discussing one’s life, no matter how humble or bizarre it may be.⁴⁰

³⁹ In a passage not discussed in this essay, Artemidorus mentions the name as one of the basic aspects of an individual’s identity (1.3). The loss of the name is therefore a loss of a fundamental part of oneself.

⁴⁰ For contrasting views on the motivations behind sophists’ encomia to their native or adopted cities, see Bowersock (1969) 17–29 and Anderson (1993) 27–8. For an example of a figure within a sophistic text taking particular pleasure in identifying with a less famous native town in contrast to better known locations, see Apollonius in praise of Tyana in Philostratus, *VA* 1.33.

I would like to close this paper with a sketch of some parallels for this emphasis on local culture in some of the other authors of the Second Sophistic. Artemidorus' approach to 'mapping' cultures on a case-by-case basis rather than as part of a synoptic whole is similar to the methodology in Pausanias' *Periegesis*, a geographic survey of 'all things Greek' (πάντα . . . τὰ Ἑλληνικά, 1.26.4). The *Periegesis*, in spite of its totalising drive, reflects a sort of localist approach to geography. Unlike Varro, Pliny or Vitruvius, Pausanias provides in-depth descriptions of individual locales, examining each separately in terms of their culture, race and identity and giving them equal value. In this sense, Pausanias mirrors Artemidorus' empirical method and tendency to avoid a systematic approach. In both authors, this has been read as a political gesture in some sense. Their esteem for local places and their antipathy towards or else failure to acknowledge the overarching structure of Roman empire have been described as subtle anti-imperial gestures.⁴¹

Acceptance of the positive role of the homeland in self-formation, more specifically, is a feature of this period as well. It is expressed in Lucian's encomium to the abstract phenomenon of the 'fatherland' whose value is, Lucian assures us, universally recognised:⁴² 'That "nothing is sweeter than one's native land" [Hom. *Od.* 9.3] is already a commonplace. If nothing is sweeter, then is anything more holy and divine? Truly of all that men count as holy and divine their native land is cause and teacher, in that she bears, nurtures, and educates them (αἰτία καὶ διδάσκαλος, γεννησαμένη καὶ ἀναθρεψαμένη καὶ παιδευσασμένη)' (*My Native Land* 1). As in Artemidorus' text, the formative roles of the fatherland are anthropomorphised, taking on the professions of nurse and teacher, who are praised in divine terms. Lucian's view resembles Artemidorus' own insofar as both authors

⁴¹ On Pausanias, see Elsner (1999) 'It is as if, in the assured domain of an empire hardly troubled by external foes or internal discord, it was possible to assert and to celebrate the parochial as a way of defining local identities and subjectivities not only within Roman dominion but also to some extent in opposition to it' (10). On Artemidorus' political views, see Bowersock (2004) 58–9.

⁴² And yet, in his dialogue the *Hermotimus*, Lucian seems to argue just the opposite. Lucinus, a stand-in for Lucian himself, challenges Hermotimus' blind faith in the Stoic sect. Pressed to offer his own definition of virtue, Lucinus defines it as a city inhabited by happy, wise, just, and temperate citizens (22). In such a polis, he goes on to say, 'all are immigrants and foreigners [ξένοι], and no one is a native, but many barbarians and slaves are citizens of it and also ugly and short and poor people, and in general anyone who wants to participate in the city . . . ; for someone to become a citizen, intelligence and a desire for what is noble and hard work suffice . . . Superior and inferior and noble and commoner and slave and free neither exist nor are spoken of in this city' (24). According to this view, knowledge has a place within a city, but this city is not geographically specific; rather, it is the placeless city of the mind whose inhabitants are the good and the wise. In this dialogue, Lucian perhaps resembles Artemidorus insofar as both believe that one must leave behind the homeland in order to achieve knowledge, although for Lucian this implies philosophical rather than actual travel.

see the homeland as contributing to the formation of the individual because it is a source of protection as well as of enculturation. And, indeed, as we saw above, Artemidorus further mirrors Lucian in that he refers to the homeland specifically as a nurse who receives *θρεπτήριον* in thanks for her care (3.66).

Finally, the contextual approach to dream interpretation requires one to consider alternative perspectives to seemingly natural or normative points of view. This emphasis on recognising the possibility of different perspectives can be related to a tendency in Second Sophistic writers to provide Greek perspectives on Roman activities. It is present, for example, in Philostratus' *Life of Apollonius*, which reveals the necessity of Greek wisdom to achieve Roman political success. The Greek sage Apollonius, after his voyages to India, meets the newly ascended Vespasian in Alexandria (VA 5.27–38). Whitmarsh describes this passage as Philostratus' 'king-making' scene and observes how, although Vespasian's rule is never called into question, Philostratus repeatedly emphasises that the emperor's knowledge and power are, in a sense, contingent upon Apollonius.⁴³ Apollonius has privileged insight into political affairs and Vespasian asks him for instruction in the ways of kingship (5.35–6). In fact, he remarkably requests that Apollonius make him emperor, and Apollonius replies that he has already done so remotely through a prayer (5.28). These interactions between the Roman emperor Vespasian and the Greek sage Apollonius provide a radical new perspective on imperial power. Here, Roman supremacy is not explicitly rejected but subtly undercut, depicted as a product of Greek wisdom.⁴⁴

A similar case can be found in Plutarch's *Parallel Lives*, which conduct a remarkable revision of Greek and Roman history. Writing paired biographies of Greek and Roman notables in a period of major imbalance of power between the Roman empire and Greece as subject, there is no evidence that he viewed the outstanding figures of either culture as superior.⁴⁵ However, as Swain observes, in the area of *paideia* Plutarch writes about Roman history from a distinctly Greek perspective, and this history is sometimes critical in nature. For example, he pairs the Roman king Numa with the Spartan Lycurgus and notes that, while Numa's virtuous and just system of government was admirable, it soon failed because it lacked the 'cohesive force of education' (καὶ οὐδὲ ὀλίγον χρόνον ἢ καλλίστη καὶ δικαιοτάτη κατάσταση)

⁴³ Whitmarsh (2001) 230–7.

⁴⁴ Philostratus seems generally interested in providing unauthorised versions of classical culture, as in the Brahmins' remarkable revision of the Tantalus myth, where Tantalus is praised for his desire to share the divine with humanity (VA 3.25).

⁴⁵ Swain (1996) 139.

ἔμεινεν, ἅτε δὴ καὶ τὸ συνδετικὸν ἐν αὐτῇ, τὴν παιδείαν, οὐκ ἔχουσα, 4.12).⁴⁶
 The failure of Numa's government is due to the absence of a Greek cultural construct, *paideia*. Like Artemidorus, Plutarch seeks to maintain the importance, indeed, the necessity of non-Roman contributions to culture and politics in literary space in spite of the actual, historical domination of Greece by Rome.

Conclusions

Artemidorus' *Oneirocritica* is, in a sense, schizophrenic in nature. It tries to compose an encyclopaedic compendium of dream interpretation based on a finite set of universal items and practices, but recognises that this is, ultimately, a failed enterprise due to the necessity of acknowledging the broad spectrum of cultural practices when interpreting dreams. When read against the backdrop of the Latin encyclopaedic tradition and Greek assertions of autonomy and individuality in the Second Sophistic, however, this aspect of the *Oneirocritica* becomes clearer if not more profound. In turn, encyclopaedic writing during this period appears more malleable, used to express a broader range of views than is typically recognised. Several recent monographs have correctly observed a link between encyclopaedic discourse and the physical and cultural domination of imperial Rome. This paper has tried to show that the encyclopaedic mode is not, of course, the sole property of Romans but, in Artemidorus' case, is used by a Greek to express dissatisfaction with overly assertive claims to total knowledge and to create space for minority points of view.

⁴⁶ Cf. Swain (1996) 141.

8 | Encyclopaedias and autocracy

Justinian's *Encyclopaedia* of Roman law

JILL HARRIES

For this book we have prescribed the title of *Digest* or *Pandectae* (*Encyclopaedia*) because it contains within it a comprehensive collection of all the divisions and forms of law and because it has received into its single compass material assembled from every source. (Justinian, *Constitutio Tanta* 3.1)¹

Introduction

Encyclopaedias are seldom compiled by heads of state, still less by the Deity. The collection of Roman legal texts assembled in the early 530s AD by the legal advisors of the Byzantine emperor Justinian and known as the *Corpus iuris civilis*, the longest of which was his *Encyclopaedia*, is the exception. Those directly responsible were the legal advisors to the emperor, headed by the emperor's quaestor, Tribonian. Of the six leading commissioners who had been selected by Tribonian himself to work on the *Encyclopaedia*, four were professors of law and the other two were Tribonian and another legal administrator, Constantinus. The majority of the rest were advocates. The composition of the group responsible for the *Encyclopaedia* is important because the project was not only academic; it was also subject to intense political scrutiny from an all-powerful emperor, who claimed divine guidance and support for his actions.

More commonly known now as the *Digest*, Justinian's *Encyclopaedia* (*Pandectae*) was part of an imperial project to impose system on a heterogeneous accumulation of 'laws' or 'constitutions' issued by emperors, and the writings of authoritative interpreters of the legal tradition, known as

¹ The title requires explanation: '*Constitutio*' (usually abbreviated as 'C') was the technical name for all laws issued by emperors and *Tanta* (or as we shall see, other titles, such as *Deo Auctore*) is the opening word of the law, by which the law is conventionally identified. For the benefit of Latinists, I will, on occasion, also supply a Latin text in the notes, which will be explained in English either through direct quotation or paraphrase in the main text. The translation of *Pandectae* as 'encyclopaedia' reflects the usage adopted by the translators of the *Digest*: Watson (1985).

jurists.² The compilation of imperial laws was completed first (but was updated five years later) and is known as the Justinianic Code (*C. Just.*). The fifty-book *Digest* or *Encyclopaedia* (*Pandectae*), which followed, was Justinian's statement of the totality of juristic law.³ As we shall see, Justinian's vision of 'totality' was defined, first, by what was 'totally' covered and, second, by the exclusion of all juristic writings deemed superfluous to his project. Both compilations were joined by a shorter work, the *Institutes*, based mainly on a second-century teaching book of the same name by the jurist Gaius; this was to serve as an introduction to the basic principles of Roman law.⁴ In a series of turgid official pronouncements, most, but not all, in fact written by Tribonian in the emperor's name, Justinian laid out his objectives, gave detailed instructions, and in due course credit and thanks, to the committees charged with the work, and invoked the name of the Supreme Deity as the true inspiration and enabler of the project, which, the emperor admitted, was beyond the ability of mere mortals to achieve. But the real moving spirit was Tribonian, and it is to him and the committees under his supervision that the intellectual excellence of the *Digest* as legal encyclopaedia is due.⁵

The *Corpus iuris civilis*, and especially the *Digest*, was to shape the law of mainland Europe and beyond.⁶ Its contents are therefore usually studied within the context of a legal tradition, which in many ways was (and is) the preserve of experts in the discipline. Less attention is given to the *Digest* or *Pandectae* as an exemplar of the broader 'encyclopaedic' tradition examined in this volume. In what follows, we will examine the reservoir of knowledge from which the *Digest* was created and the nature of the claim of 'universality' or 'comprehensiveness' implied in the title, *Pandectae* (Greek 'all-embracing').⁷ We will also consider why the work received two titles in the first place; the educational aim of the *Pandectae* in the context of a relatively neglected earlier legal compilation; and the unique character of Justinian's *Pandectae* as an expression of power over both past and future law-making.

² For the full background to Justinian's project and the jurists, see Humfress (2005). For what is still the standard history of the Roman 'legal science', in which the jurists were the experts, see Schulz (1946).

³ Translated with facing original text by Watson (1985), using text of Mommsen (1868).

⁴ Justinian's *Institutes* is translated by Birks and MacLeod (1987) from text of Krueger (1915). Gaius' *Institutes* is translated with facing text by Gordon and Robinson (1988).

⁵ The *Digest* Commission was divided into three committees, each headed by two of the six commissioners and known as the Sabinians, the Edictals and the Papinians. They worked in parallel and each had an allocation of books to read and excerpt; see Honoré (1978) 142, 146–70.

⁶ Stein (1999). ⁷ The classical Greek singular is *pandektês*, plural *pandektai*.

The library of Tribonian

Encyclopaedias are works of research, not (as a rule) imagination. Libraries, as storehouses of information and knowledge, are a desirable prerequisite for the composition of encyclopaedias, and the *Pandectae* of Justinian was no exception. But large libraries also contributed to the status of their owner. Book production was a laborious process; libraries often functioned as scriptoria as well, as their owners donated copies of books in their possession to other scholars, friends – and even emperors.⁸ Books were thus accumulated through a process of gift exchange between people with shared interests, or by inheritance. As Tony Grafton and Megan Williams have explained, well-stocked libraries were an expression of cultural power and ‘served as a particularly powerful expression of the links between like-minded members of an inward-looking social group’.⁹ The size of Tribonian’s library, therefore, advertised not only that he was a good lawyer but also that he was regarded as such by other experts in the law.

The contribution of Tribonian’s personal collection of learned legal works was fundamental to the project, although, as we shall see, its exact contents cannot be established:

In this present completed edition of our Digest, laws have been assembled from so great a number of volumes that one might say that men learned in ancient lore not only were ignorant of them but had not even ever heard their names. Tribonian, the most excellent man, has supplied the greatest resource of books on ancient wisdom, among which were many unknown to even the most learned men themselves.¹⁰

The compilers boasted that they had read two thousand books and some three million lines of text. Rather less than two thousand books were duly listed as the primary sources.¹¹ It is impossible to ascertain how far these

⁸ In Eusebius’ *Life of Constantine* 4.36.1–3, Constantine requests fifty copies of the bible from Eusebius of Caesarea’s scriptorium – with a promise that the parchment would be supplied by the relevant imperial finance officer.

⁹ Grafton and Williams (2006) 14–15. For the library of Eusebius of Caesarea, see Carriker (2003).

¹⁰ *C. Tanta* 17: *in praesenti autem consummatione nostrorum digestorum e tantis leges collectae sunt voluminibus, quorum et nomina antiquiores homines non dicimus nesciebant, sed nec umquam audiebant . . . antiquae autem sapientiae librorum copiam maxime Tribonianus vir excellentissimus praeuit, in quibus multi fuerant et ipsis eruditissimis hominibus incogniti.*

¹¹ Honoré (1978) estimates the total at 1528, plus possible alternative editions or manuscript traditions. For the list in translation, see Watson (1985) lxiii–lxvii. Compare Pliny the Elder’s boast (*Natural History*, preface 17) that he had read 2,000 books, mostly unknown to students, and collected the results of his researches in 36 volumes; these would contain, according to Pliny, 20,000 noteworthy facts, culled from 100 authors, plus information ignored by his predecessors or discovered more recently.

came from the single, celebrated library of Tribonian himself, and how far they represent volumes collected from other sources. However, something can be inferred about the contents of Tribonian's library and his intellectual background, from the imperial constitutions of which he was the invisible author.

First, a word on Tribonian himself. Born late in the fifth century, probably in Pamphylia (southern Turkey), he received a good education at an unknown location, perhaps the famous law school at Beirut;¹² the later Byzantine writers, Procopius the historian and John the Lydian praised him for his exceptional learning. After a probable stint as a professional advocate working in the courts of the praetorian prefect (head of the eastern provincial administration), he was appointed, in February 528, to the commission headed by John of Cappadocia, Justinian's chief minister, which had the job of compiling the Justinianic Code. Late in 529, Tribonian became imperial quaestor to Justinian, and thus responsible for the drafting of his laws, a post he held till January 532. He was then dismissed in the aftermath of the Nika riots, a public riot involving the circus factions in the hippodrome, which had threatened the position of Justinian himself. Although probably a victim of the political fall-out from those events, he was also tainted with suspicions of selling justice for profit.¹³ However, he continued to head the law commission working on the Digest, promulgated on 11 December 533 in the *Constitutio Tanta*, and on the *Institutes*, proclaimed a few weeks earlier (*Constitutio Imperatoriam*, 21 November 533). In recognition of his achievement, he was reinstated as master of the offices (head of the court bureaucracy) with the rank of ex-consul. By the spring of 535, he was quaestor again for the second time, and remained in post till his death in 541/2.¹⁴

As Tony Honoré has shown, Tribonian stands out from other quaestors in late antiquity. He was fascinated by the juristic tradition and, in the laws written for Justinian, made frequent use of the opinions of past jurists, mostly dating from the second and third centuries AD.¹⁵ It is thus possible to ascertain at least part of the contents of his legal library from his citation of jurists in the constitutions. At the core was a group frequently cited in the law courts. A century earlier, in 426, in the context of a long constitution addressed to the Roman senate on laws, trial procedures and succession, the emperors Theodosius II and Valentinian III had stated that the works of

¹² For the Beirut law school, see Collinet (1925); Hall (2004) 195–220.

¹³ Procopius, *Wars* 1.24.16–17. ¹⁴ Honoré (1978) 40–69.

¹⁵ Honoré (1978) 77, counting sixty-four citations of jurists in two years of Tribonian, compared with fourteen in the previous three hundred years.

only five jurists were valid for purposes of citation in court.¹⁶ The five were Gaius, the second-century author of the *Institutes*, which would provide a model for Justinian's work of the same name; the Severan jurists Papinian, arguably the greatest of all ancient legal thinkers, Paulus and Ulpian; and Ulpian's pupil Modestinus. All five were also frequently cited by Tribonian. But in addition the constitution of 426 had specified that others, whose works were cited by the five, would also count as valid, subject to a check on the manuscript tradition to guarantee authenticity; the prime examples given were (Cervidius) Scaevola, who wrote under Marcus Aurelius, (Massurius) Sabinus, a relatively impoverished legal scholar, contemporary with the emperor Tiberius (reigned AD 14–37),¹⁷ (Salvius) Julianus, the codifier of the Praetorian Edict, and (Ulpian) Marcellus, author in the second century of a *Digest* – although others were not excluded. These also were cited by Tribonian in Justinian's laws but, as we shall see, not all at first hand.

Other names in addition to the above are also present in Tribonian's constitutions: P. Iuventius Celsus, consul II in 129; Sextus Caecilius Africanus, who also features in the work of Aulus Gellius¹⁸ and whose nine books of *Questions* would be cited verbatim in the *Digest*; and the third-century legal educator, Aelius Marcianus, whose sixteen-book *Institutiones* is cited in the *Digest* some 280 times. Most intriguing is the relatively obscure Tertullianus, author of a little work on the *peculium* (personal property) of soldiers, who is cited in a learned discussion of conflicting opinions on the rights of the insane to benefit from wills.¹⁹ This little treatise also surfaces three times in the *Digest*.²⁰ Tribonian's legal horizons extended back even into the republican past; in a Justinianic *Novella* from the mid-530s he cites Q. Mucius Scaevola, consul in 95 BC, author of an influential eighteen-book work on the civil law, and also credited with a single-book collection of *Definitions* (Greek title, *Horon*),²¹ although this may be the creation of a later anthologist.

¹⁶ *C. Theod.* 1.4.3. This is known as the 'Law of Citations' and was included in the *C. Just.* first edition, but not the second, as it was superseded by the *Digest*.

¹⁷ *Dig.* 1.2.2.50. Pomponius' *Handbook* on legal history records that Sabinus was never well off and relied on handouts from friends. The legal historical tradition in general ignores the antiquarian element present in the works of the Augustan and Tiberian jurists, and attested by Pliny the Elder and Aulus Gellius. These included Sabinus, Antistius Labeo and Ateius Capito (the last, consul in 5 AD).

¹⁸ Gell., *NA* 20.1, discussed by Harries (2007) 55–7.

¹⁹ *C. Just.* 5.70.7.1a. For the list, which does not differentiate between methods of citation, see Honoré (1978) 77 n.40. It is possible that this Tertullianus was related to the African Christian writer of the same name: see Harries (2009).

²⁰ *Dig.* 24.1.23; 29.1.33; 49.17.4. ²¹ *Just., Novellae* 22.43.

But citation alone is not proof of the presence of a book in a collection. Non-jurists regularly cited authorities, which they had in fact found quoted or referred to in later works (or even perhaps invented).²² The reading of the extant writer was thus made to appear more wide-ranging than it actually was. This is also true of juristic writing. However, lawyers' citation of past authorities had a practical, as well as an academic, purpose; jurists' legal opinions affected the outcome of trials and depended for their effectiveness more on the citation of past authorities than new arguments based on legal principle (juristic writing is shaped by real or imaginary cases).

Both paraphrase and (apparent) verbatim citation at second hand could even take place without resort to the originals, because the original texts were themselves lost.²³ In 426, the 'Law of Citations' had expressly countenanced the citing of jurists other than the select five, provided that they were cited by one of the five. In the case of Tribonian, some second-hand citation of this kind can be detected, through his method of signalling his use of a text (although this is not an invariably reliable indicator). So, for example, on the manumission of public slaves²⁴ he first draws attention to the disagreement between the ancient authorities, and cites an imperial enactment of Septimius Severus, from Marcian's *Institutes*. He then observes that a different view was taken by Ulpian *On Trusts*, Book 6, and Paulus, *On Trusts*, Book 3. Finally he reports that in Paul, Sextus Caecilius Africanus, praised as a respected authority on 'the ancient law', had also contributed an opinion. Africanus therefore would have counted for purposes of citation in court, because he was present in the works of Paul, but the citation is not evidence that Tribonian had a copy of Africanus on his shelves.

However, Tribonian's scrupulous ascription of second-hand quotations to their sources can also support a case for the direct use of an author, when he fails to name an intermediary. Tertullianus, as we have seen, appears to have been cited directly – and the little book on *peculium* will also re-emerge in the Digest itself.²⁵ A far more significant figure, who appears to have been cited both directly and at second hand was Salvius Julianus. At one point, Julianus, as cited by Papinian, is adduced to refute a counter-argument by Ulpian, supported by Celsus and Marcellus,²⁶ and he is described there as 'a man of the very greatest authority and codifier of the Praetor's Edict'; elsewhere, he

²² See Cameron (2004), 89–123, 235–7.

²³ Cf. Cameron (2004), 276, 'no-one who looks at the sources of the few surviving fragments of either [Ion of Chios and Cleidemus the Atthidographer] . . . will find it easy to believe that original copies were still circulating for casual consultation in the mid-second century'.

²⁴ *C. Just.* 7.7.1. ²⁵ *Dig.* 24.1.23; 29.1.33; 49.17.4. ²⁶ *C. Just.* 4.5.10.

is cited directly, without mention of an intermediary.²⁷ As Salvius Julianus was the author of a monumental legal commentary, extending over ninety books (and some twenty years of hard labour), his presence in Tribonian's library would have been hard to miss.

Massurius Sabinus, who lived and wrote five hundred years before Tribonian, is a different story. On 29 July 531, Tribonian, in the name of Justinian, issued a constitution about last wills and testaments, which was split up to appear under different headings in the second edition of Justinian's Code. One case study exploited by the legislator is drawn explicitly from 'the books of Ulpian, which he wrote as commentary on Massurius Sabinus'.²⁸ Elsewhere in the same constitution he refers to 'Sabinus' and his opinion on substitution of heirs in a will, as if he is quoting directly from Sabinus' text, without the help of an intermediary commentator.²⁹ Sabinus' textual survival is also implied by the inclusion of his three books *On the Civil Law* in the list of works consulted by the Digest commission (what might be termed a 'bibliography of works cited'). So, was the text of Sabinus' *On the Civil Law* in Tribonian's famous library (or indeed in the library of anyone else)? Considerable scepticism is in order. Nowhere in the entire *Digest* are the words of Sabinus himself quoted directly, except where cited by Paulus (once) and Ulpian (once) in commentaries on Sabinus' treatise, *To (or On) Vitellius*.³⁰ And Tribonian's admission that he consulted Ulpian on Sabinus elsewhere in the constitution on wills suggests that he derived his references to Sabinus' opinions from Sabinian citations in his texts of Ulpian and other later commentators, not from Sabinus' original text.

In fairness to Tribonian, it should be emphasised that citation at second hand was perfectly ethical, and indeed endorsed by implication in the 'Law of Citations'. But the appearance of direct citation, where there is no independent evidence of textual survival in the Digest or elsewhere, cannot be used to support the presence of a book from, say, the early first century in a sixth-century legal collection. In fact, the presence of very 'old' books was no longer necessary. As happened also with other series of reference works, including encyclopaedias, successor works drew on their predecessors, but then reshaped their contents and ultimately superseded them. There was thus no reason, in the sixth century, to consult, say, the eighteen-book treatise by Q. Mucius Scaevola *On the Civil Law*, composed probably in the 80s BC, because that revered work had been recycled by, among others, Sabinus in the first century and Pomponius (*On Quintus Mucius*) in the second.

²⁷ *C. Just.* 3.33.15.1–2. ²⁸ *C. Just.* 6.24.14.preface.

²⁹ *C. Just.* 6.26.10. ³⁰ *Dig.* 28.5.18, Paulus; *Dig.* 32.45, Ulpian.

What probably distinguished Tribonian's library from those of his contemporaries was not that he departed substantially from the canonical authors listed in the 'Law of Citations' (although, as we have seen, he had acquired a few curiosities), but that he had more of their works to hand. In other words, the recycling process, which would often entail not only reshaping but also drastic abbreviation of the learned but lengthy original, was arrested by Tribonian's perhaps idiosyncratic passion for detail. Thus, while the preference of advocates and judges would have been to resort to works of reference like Ulpian's *Institutes*, Tribonian had access to the whole of that author's formidable 81-book commentary on the Edict.

Digest, structure and organisation

Justinian's *Digest* or *Pandectae* was explicitly limited to law and was thus not a collection of all knowledge. 'All-embracing' collections had been attempted in the past, under various titles but the use of *Pandectae* as a title was unusual.³¹ Late antique researchers continued to produce attempts at systematisation of knowledge for didactic and other purposes. Christians in particular tested the boundaries of existing systems of knowledge. Eusebius of Caesarea drew on the earlier work of the Christian chronographer, Sextus Julius Africanus (early third century), who had himself organised a library for the emperor Severus Alexander at Rome. Eusebius' comparative chronologies of Greek, Roman and biblical history, compiled in the late third century, expanded, though they did not strictly universalise, Greco-Roman ideas of past time;³² his *Chronicle*, as a new means through which Christian universal history could be expressed, was continued in the fourth and fifth centuries by Jerome and others.

One bold, but sadly now lost, exercise in presenting the 'totality' of human knowledge was the *Christian History* of the priest Philip of Side, compiled in Constantinople in the late fourth or early fifth centuries.³³ Drawing on a sizeable library covering 'all branches' of knowledge, Philip's work consisted of thirty-six very large volumes, written in a florid and

³¹ Gell., NA 13.9.3 mentions the *Pandectae* of Cicero's freedman, Tiro, describing it as comprising 'every type of matter (*res*) and system of knowledge (*doctrina*)'.

³² For Eusebius' chronicles and his successors, see Burgess (1999), 21–90 (Eusebius); 90–8 (Jerome as witness for Eusebius).

³³ This is known only from Socrates' unfavourable review in Soc., *Church History*, 7.27. Socrates noted that Philip did not call his work a 'Church' history; his purpose, therefore, was not to provide a history of Christianity in the manner of Eusebius, but a narrative of the Christian world.

verbose style. Nor did Philip confine his attention to Christianity; in his bid to represent all knowledge as ‘Christian’, he also introduced material on geometry, astronomy, arithmetic, music and geography. In the opinion of the fifth-century church historian Socrates, Philip’s work was marred not only by its prolixity and repetitiveness, but also its failure to select and use material appropriately, its lack of organisational structure and the historian’s refusal to follow chronological sequence. The grounds for Philip’s (alleged) failure are significant: universality was pointless unless criteria of relevance were established, and the material organised in a comprehensible and coherent manner. Although it is not known that Philip’s purpose was to educate, his failure to impose a structure meant that his thirty-six weighty tomes were rendered useless as a potential educational tool.

In more traditional vein, the fifth-century anthologist Stobaeus assembled a collection of useful advice, embellished by appropriate citations from earlier authors for the benefit of his son. Although labelled an ‘anthology’, Stobaeus’ work contained ‘encyclopaedic’ features. Like the miscellaneous collections of Aulus Gellius (*Attic Nights*) and Aelian (*On Animals*) in the second century and Africanus’ *Kestoi* (or ‘Charmed Girdles’) on magic-related topics in the third, the content of Stobaeus’ anthology, if not ‘universal’, was wide-ranging, brief in format and accessible. The difference between ‘miscellany’ and ‘encyclopaedia’ was in fact not always obvious. A ‘miscellany’, while not being comprehensive in its treatment of subjects covered could, nonetheless, claim a sort of universality from the sheer range of topics addressed; it was also, like the encyclopaedia, designed to educate.³⁴

The ‘universality’ of Justinian’s *Encyclopaedia* even as a legal compendium was explicitly limited by its context in the *Corpus iuris civilis*. It was to overlap as little as possible with the already authoritative Justinianic Code, lest the legal ‘meadow’ be overrun with brambles.³⁵ Moreover, the type of encyclopaedia envisaged was qualified by the existence of the two equipollent titles, each of which served to complement and define the other. In what follows, it will be argued that the Digest label referred primarily to the classification and organisation of material within the compilation.³⁶ As a *Pandectae*, it was educational, universal within a defined scope, and accessible. Both terms have precedents in the legal tradition.

³⁴ Cf. Morgan and Oikonomopoulou in chapters 5 and 6. ³⁵ C. *Deo auctore* 9.

³⁶ On *digerere* and its derivatives as referring to organisation, see Cicero, *On the Orator* 1.186; Suetonius, *Life of Caesar* 44 (delegation to Varro of the organisation of a public library); Pliny, *Natural History* 2.15; 28.65; Quintilian, *Institutes of Oratory* 10.7.30; Gell., *NA* 1.2.6; 19.1.4.

The earliest author of a *Digest* known to the compilers of Justinian's Digest was P. Alfenus Varus, consul in 39 BC.³⁷ His work, in forty books, was in part a record of seminar discussions conducted by Cicero's friend, the jurist Servius Sulpicius Rufus and the citations from it contain some entertaining case studies.³⁸ However, the Digest form reached its height in the second century AD and is associated with the radical legal reforms of the emperor Hadrian. In c. 130, that emperor ordered a young jurist from Hadrumetum in Africa, Salvius Julianus, to revise one of the seminal texts of the Roman civil law, the Praetor's Edict.³⁹ The main job of the praetors at Rome under the republic, which continued under the early empire, had been jurisdiction and thus the presidency of the law courts at Rome. Each year, the new praetors issued an edict on how they would administer the law. As many praetors were not legal experts, it was common for new praetors to take over a predecessor's edict, as it stood. By the time of Hadrian, the content of the Edict had stabilised and Julianus' job was to revise it, so that it could then take a fixed form, with no further revisions being permitted to future praetors. Thenceforward, revisions of the so-called *ius honorarium*, or 'magistrates' law', would be the preserve of the emperor.

However, as Justinian was later to note, Hadrian forgot to muzzle the jurists. Now empowered by imperial sanction, the most eminent jurists continued to perform their established function of providing authoritative interpretations of the law, which were customarily cited in legal court-rooms, and which in practice had the force of law. The imperial monopoly of interpretation of the Edict was thus inadvertently infringed. Both Julianus himself and the nominal supervisor of the Edict project, P. Iuventius Celsus (consul II, in 129), proceeded to write lengthy⁴⁰ legal commentaries, entitled *Digests*, which took what became the standard form. The first part contained detailed commentary on the Edict, following the order of the clauses as fixed by Julianus himself. The second consisted of interpretations of a list of republican and Augustan statutes and senatorial resolutions (*senatusconsulta*), and itself seems to have become canonical. This structure was also adopted by later authors of *Digests* at Rome, notably Ulpian Marcellus, writing probably in the 160s,⁴¹ and Q. Cervidius Scaevola, a legal advisor to

³⁷ For the efforts of another pupil of Servius to do something similar, see *Dig.* 1.2.2.44 (Pomponius on Aufidius Namusa).

³⁸ Lenel (1889) I, coll. 37–54.

³⁹ Jerome, *Chron.* s.a. 130. Text at Riccobono, *FIRA* ii, 335–89.

⁴⁰ Celsus, 39 books (Lenel (1889) I, coll. 127–69); Julianus, 90 books (Lenel (1889) I, coll. 318–484). Celsus, Books 1–27 and Julianus, Books 1–59 were on the Edict, the remainder on statutes and senatorial resolutions.

⁴¹ Lenel (1889) I, coll. 589–632 in 31 books, of which the first 21 were on the Edict.

Marcus Aurelius and his successors, whose opinions on wills were still cited by imperial bureaucrats in the late fourth century.⁴² The Edict, known from early in the third century as the ‘Perpetual Edict’, became the framework for commentaries entitled *Ad Edictum* (On the Edict) under the Severans, and underlies the structure of the first parts of the Theodosian codification, promulgated in AD 438. However the title seems to have fallen out of general use after the end of the second century, until resurrected in Justinian’s *Digest*.

The title *Digest*, then, signals a structure, based on the Edict, supplemented with commentary based round the contents of ancient statutes and senatorial resolutions. For Justinian’s jurists, it was axiomatic that the Edict should dictate the structure of legal material and its presentation; indeed teachers of law were castigated for ignoring that all-important framework. But Julianus and Hadrian shaped Justinian’s thinking in other ways as well. Hadrian’s takeover of the praetor’s powers to make new ‘edictal’ law had determined the starting point of two authoritative collections of imperial rescripts, or legal decisions, under Diocletian in the 290s AD; the compilers, Gregorius (or Gregorianus) and Hermogenian had chosen to begin their selection with Hadrian.⁴³ Then, in 529, Justinian integrated their collections into his Justinianic Code, reaffirming the importance of Hadrian (and Julianus) as the starting point for a new kind of imperial legislation. Moreover, Justinian also objected (at some length) to Hadrian’s failure to bring the jurists to heel – Salvius Julianus, by implication, as the author of both Edict and (independent) *Digest*, most of all. The adoption of Julianus’ title for his new juristic compendium must thus have carried a dubious resonance. Julianus and his colleagues would be acknowledged for their past contribution, and at the same time be made redundant for the future.

Pandectae and education

Pandectae by jurists do not appear to have been a second-century phenomenon, and their appearance post-dates the generations of Salvius Julianus and Cervidius Scaevola. With the accession of the African-born Septimius Severus in 193, a new breed of jurist emerged who, although fully conversant with the Latin legal tradition, nonetheless also drew on the cultural perspectives of the Greek and even the Semitic world. Of these,

⁴² Lenel (1889) II, coll. 215–70, in 40 books, of which the first 29 were on the Edict. On Scaevola in late antiquity, see *Theodosian Code*, 4.4.3.

⁴³ On the Codes of Gregorius and Hermogenian, see Corcoran (2000) 25–42; Connolly (2010).

Domitius Ulpianus, from Tyre in Phoenicia, was the most prolific. So great was his reputation that of the 244 books ascribed to him, some 26 may be spurious. One of the 26 was entitled *Pandectae*, a ten-book work, later compressed into one volume,⁴⁴ which may have been the jottings of a legal bureaucrat.

Of greater interest, because the author is known to have had influence in late antiquity, is the *Pandectae* of the pupil of Ulpian, Herennius Modestinus,⁴⁵ who also served as a legal advisor to Severus Alexander and to emperors in the 230s. Modestinus broke with tradition by being the first prominent jurist to write a whole legal treatise in Greek, an analysis of guardianship addressed to a lawyer friend in Pontus on the Black Sea. He was not regarded by the legal bureaucrats of Justinian as being among the great juristic thinkers and is relatively seldom cited in Tribonian's constitutions. However, the structure and what is known of the style of Modestinus' *Pandectae* conform to what would be expected of a teaching book. Modestinus' account of the law of persons and status, followed by 'things', including property, family law and succession, accords with the arrangement of Gaius' *Institutes*. However, reflecting an increased juristic focus on criminal law, already present in the second century, Modestinus departed from Gaius by concluding his survey, in Book 12, with explanations of the criminal statutes on treason, homicide, murder of a close relation, forgery and perhaps extortion.⁴⁶ Justinian, too, would place interpretation of the criminal statutes close to the end of the *Digest* (Book 48), and outside the first 36 books, which he would specify as a part of his new legal syllabus. Modestinus' style is simple and straightforward, setting out definitions and rules without discussion of alternatives or debate. Thus, for example, we are told that 'natural or emancipated sons cannot be returned to the legal control of their fathers against their will'; and 'a legacy is a gift left in a will'.⁴⁷ Readers seeking an introduction to basic principles would thus be well served. Moreover, they would also have covered, albeit superficially, all the areas of Roman law required to be known by the practising judge or advocate.

It may thus be suggested that Justinian's choice of his Greek title, *Pandectae*, reflects the educational and didactic purpose of the *Digest*. As his constitutions promulgating the great work reveal, the educational purpose,

⁴⁴ Citations of Ps-Ulpian's *Pandectae* are at *Dig.* 12.1.24; 40.1.34. For possible attribution to a legal official of Elagabalus (218–22) and Severus Alexander (222–35), see Honoré (2002) 212–15.

⁴⁵ Lenel (1889) I, coll. 721–8; Honoré (1994) 76–80.

⁴⁶ *Dig.* 48.4.7 (treason), 48.8.8 (homicide), 48.9.9 (parricide), 48.10.30 (forgery), 38.10.4 (extortion, perhaps).

⁴⁷ *Dig.* 1.6.11 (sons), 31.36 (wills).

not prominent at launch, had become a priority. In a long discussion of legal education in general issued in the *Constitutio Tanta* of November 533, Justinian complained bitterly of the inadequacies of the present law syllabus for students, as being partial, selective and incoherent. This justified its total replacement with the *Institutes*, which was to become the foundation first-year textbook, and the first thirty-six books of the *Digest*, although some flexibility was conceded, as to the order in which they were read. The second to fourth years, therefore, were to be devoted to the *Digest*, which, *inter alia*, would open the delights of Papinian to a wider student readership, as he would be read in the second year, as well as (as previously) the third. In the fifth (and perhaps optional) year, students could immerse themselves in the constitutions of the *Codex Justinianus*.

The emperor did not stop with the syllabus. As is still common in some traditional universities, each student year carried a different label. In law schools prior to Justinian, first-years had been known as ‘two-pounders’, but, in celebration of the *Institutes* and their author, they would now be called ‘New Justinians’; the names given (in Greek) to the other years – including the third-year ‘Papianistai’ – would remain unchanged. Last, but far from least, Justinian restricted where and by whom law could legally be taught. Henceforward, the only teaching establishments with recognition were those in the ‘royal cities’ (Rome and Constantinople) and at Beirut, the site of a distinguished law school going back to the third century, if not earlier. Teachers in less favoured cities, such as Alexandria in Egypt and Caesarea in Palestine, were debarred from teaching outside the chosen three, on the grounds that they had habitually imparted spurious knowledge to their pupils; if they disobeyed, they could expect a fine of ten pounds of gold and expulsion from their community.

For Justinian, therefore, the creation of a legal syllabus was not, in the modern sense, merely academic. His choice of titles shows proper deference to legal traditions of commentary, interpretation and the duty of the jurist to instruct as well as to provide legal advice. But Justinian was no jurist. His restructuring of Roman legal education to serve the needs of a ‘Greek empire’ was an exercise in governmental control – and with government objectives in mind. Emperors in the mould of Justinian were very practical. For him, the purpose of a legal education was not, ultimately, to produce more scholars, but successful advocates and judges, so that the courts and judicial system should function properly. With future lawyers and judges now confined and controlled in centres of excellence, Justinian’s command over the content of law, its dissemination and its application in the courts, could be reckoned to be complete.

Encyclopaedism and power

The *Encyclopaedia* of Justinian and Tribonian was created with two agendas in mind. One, which most concerned Tribonian and his hand-picked committees of legal experts, was academic, and aimed to produce a coherent and comprehensive synthesis of juristic law. In their concern for reputable academic authority, order and accessibility, the lawyers' aims are consistent with those of compilers of reference works throughout the ages. Nor were Justinian's views entirely incompatible with theirs. Although he had little legal education, Justinian was intelligent enough to appreciate ability in others, including those, like Tribonian, whose talents differed from, but also complemented, his own. As all encyclopaedias should ideally be as up-to-date as possible, the emperor responded with enthusiasm to the requirement that outstanding legal questions should be resolved before the text of the *Encyclopaedia* was finalised.⁴⁸ One incidental consequence of the *Digest*, therefore, was a flurry of legislative activity on the part of the emperor, in cooperation, naturally, with his advisory council (consistory), and Tribonian himself. The emperor also wished it to be known that he took a close personal interest in the project as it evolved. He received regular updates, resolved problems as they arose and had a sight of the final draft of the text prior to its publication.⁴⁹ How far he actually went in scrutinising the text cannot be known.

However, Justinian's aims as emperor went far beyond those possible for academic encyclopaedists. His sheer audacity, by modern standards, can be illustrated by analogy. We think of the content of standard (and reputable) reference works as being reportage and distillation of current knowledge; we do not anticipate that the contents will have been changed for purposes of advancing the political or administrative agenda of the editor or his/her team. But Justinian was not alone in ascribing what we would see as non-academic considerations to his project. That distinguished Christian academic Eusebius, whom we have met before, did not compose his *Chronicle* out of an abstract concern with historical events, but to establish the primacy of Christian and Jewish history over that of latecomers, like the Romans.

⁴⁸ For the 'Fifty Decisions' and other constitutions relevant to the *Digest*, see *Constitutio Cordi*, Nov. 534: *tam quinquaginta decisiones fecimus quam alias ad commodum propositi operas pertinentes plurimas constitutiones promulgavimus*. Also Honoré (1978) 142–6.

⁴⁹ C. Tanta preface: *nostra quoque maiestas semper investigando et perscrutando ea quae ab his componebantur quidquid dubium et incertum inveniebatur, hoc numine caelesti erecta emendabat et in competentem formam redigebat*.

Justinian's definition of universality was also peculiar – and, unlike anyone else in the Roman world, he had the power to impose it. We accept that even multi-volume works like the *Encyclopaedia Britannica* will not include all knowledge and we would not assume that information or knowledge not present in the encyclopaedia was thus rendered invalid or non-knowledge. Modern assumptions are based on the expected academic integrity of encyclopaedias and other reference works in general. Moreover, modern editors have limited powers and, unlike Justinian, are not (formally) autocrats. But for Justinian, the *Encyclopaedia*, and the *Corpus iuris civilis* as a whole were not only, or perhaps even primarily, intellectual exercises. They were a means of controlling the content of all law, past, present and future.

First, Justinian sought, retrospectively, to control content by modernising the works of the ancients. In the 430s, the emperor Theodosius II had allowed the compilers of his *Code* of imperial constitutions to extrapolate what he termed 'legal content' (*ius*) from the often highly rhetorical and verbose originals. In the process, they were permitted to make limited stylistic changes to the extracts they were to use. This was because the lifting of a section of text out of its setting might produce grammatical anomalies; the extracts might not have come out as complete sentences, for example.⁵⁰ There is no suggestion that Theodosius allowed his lawyers to change the law retrospectively. Justinian, however, went much further. In his law setting up Tribonian's Commission, Justinian allowed his lawyers to revise the ancient texts not only for stylistic reasons or in the interests of clarity but also so that the texts could be legally correct, in a sixth-century context:

If you should discover in the ancient laws or constitutions anything which the ancients included in their books not written rightly (*recte*), you should amend this too and set it out in proper form, so that the version which has been chosen and set down by you will be shown to be true and the best and as if written down so from the beginning and no-one will have the temerity to assert that the text is corrupt by comparison with a reading of the ancient volume. (*C. Deo auctore* 7)⁵¹

Any suspicion that 'rightly' referred only to style is put to rest in the explanation that followed. Justinian based his supreme, retrospective authority as legislator on the 'ancient royal law', under which the power of the Roman people to legislate was passed, in its entirety, to the emperors. That power was indivisible and could not be shared with, or delegated to,

⁵⁰ *C. Theod.* 1.1.6 (December 435).

⁵¹ *ut hoc videatur esse verum et optimum et quasi ab initio scriptum, quod a vobis electum et ibi positum fuerit et nemo ex comparatione veteris voluminis quasi vitiosam scripturam arguere audeat.*

others – including, by implication, the dead. Released therefore from the constraints of antiquity – for ‘by what right can the ancient past abrogate our laws?’ – the *Digest* and its contents were totally ‘his’, to amend as he chose. Not only therefore could stylistic changes be made, repetition and prolixity ironed out and consistency enforced; ancient writers could even be reported in a sense contrary to their original text:

If something was written down in the ancients in one sense but is found to have been included in our compilation with the opposite meaning, no reproach shall be levelled at the text, but it shall be ascribed to our choice. (*C. Deo auctore* 7)⁵²

Justinian, therefore, the legal moderniser, and not the jurists, was the real legislator. The *Digest* was thus not only an encyclopaedia; it was also perhaps the longest law ever issued by a Roman emperor.

Justinian's attitude to ‘universality’ was also distinctive. The *Encyclopaedia* had drawn on every reputable ancient authority, but, once completed, the *Digest* also rendered the ancient jurists redundant (although their names were preserved through the referencing system of the new work). The *Encyclopaedia* contained ‘all’ law for the simple reason that any law not contained within it ceased to be law at all. As we have seen, the *Encyclopaedia*, along with the *Institutes*, was to have a monopolistic position in the education of law students. Moreover, its contents alone were valid for citation in court proceedings. ‘Old books’ were not banned as such, but there was no point in owning them, as their contents were no use for advocates or judges. However, potentially invidious comparison of the contents of the ‘old books’ with the *Digest* was further discouraged by punitive legal sanctions. Litigants, advocates and judges who resorted to authorities other than the *Corpus iuris civilis* were made liable to the criminal charge of forgery, and those who copied out such books and passed them on to others could also expect to be landed with claims for financial compensation and perhaps a criminal prosecution as well. The last provision is of particular interest, as it appears to be a response to questions from law teachers, presumably worried about the consequences of possessing the ‘old books’ in their private collections.⁵³

⁵² *Si aliter fuerant apud veteres conscripta, in contrarium autem in compositione inveniantur, nullum crimen scripturae imputatur, sed nostrae electione adscribatur.* To similar effect, see *C. Tanta* 10 and 20. The implications of this for use of juristic writings as documents of their time are serious and have been long debated. The view of this author, for reasons hinted at towards the end of the chapter, is that Tribonian followed his own bent more than Justinian realised, and achieved his rationalisation of the law through selection, rather than through changing the meaning of the texts themselves.

⁵³ *C. Tanta* 19 (use in court); 22 (dissemination of the texts).

Having asserted his control of the past and the present, Justinian looked forward to the future – a future without jurists. The emperor ordained that, with the exception of Greek translations and the addition of brief explanatory notes, no juristic commentaries on the *Corpus iuris civilis* would be allowed; anyone breaking this law would also be liable to a charge of forgery. But, characteristically, this innovation was justified by reference to past precedent. The Perpetual Edict had been in itself a compact and manageable text. However, it had been subjected (the emperor said) to ever-expanding commentaries by independent jurists. These, he complained, had generated yet more contradictory legal opinions and thus reduced Roman law to chaos.⁵⁴ Although, as he had conceded elsewhere, imperial constitutions were not in themselves always consistent with each other, Justinian insisted that there was only one way to prevent further confusion: the emperor alone should have the right to amend the law.

This reform was perhaps less radical in practice than might appear. The era of the independent jurist, or legal commentator, who had flourished under the late republic and the first two centuries of the empire had long gone. Even the great Severan jurists, Papinian, Paulus and Ulpian, had been imperial administrators, although the bulk of Ulpian's written work was the product of an extended sabbatical in the reign of Caracalla early in the third century. By the early fourth century, jurists had been subsumed into the imperial bureaucracy, to the point that even their names are largely unknown. The main exceptions are those acknowledged by Theodosius II and Justinian for their work on codification, some of whom served as high administrators in other capacities.

A final dimension to Justinian's self-justification was a reworking of history itself, although he could claim for it (erroneously) the authority of antiquity. In the second century, the Roman legal historian and jurist Pomponius had alleged that, from Augustus onwards, some jurists had special authority from emperors to issue responses to legal consultations.⁵⁵ This is not independently attested in the historians of the first century, and the practice may well have originated with Hadrian. Thus when Justinian declared that only jurists who had already had the sanction of emperors were eligible for inclusion in the *Encyclopaedia*, he was, albeit inadvertently,

⁵⁴ C. Tanta 21: *quod et in antiquis edicti perpetui commentatoribus factum est, qui opus moderate confectum huc atque illuc in diversas sententias producentes, in infinitum detraxerunt, et paene omnem Romanam sanctionem esse confusam.*

⁵⁵ Dig. 1.2.2.47. Many legal historians accept the existence of the Augustan so-called *ius respondendi*, despite the lack of independent attestation and Pomponius' known lack of reliability in other matters.

guilty of anachronism. It is true that most known early imperial jurists – but not all – were members of the emperors' advisory council and many had distinguished public careers independently of their contribution to law,⁵⁶ but the nature of authority under the principate was more diffused and less emperor-centred to the exclusion of all else, than Justinian could be expected to appreciate. From his standpoint, any intellectual activity related to interpretation of the law and beyond the emperor's direct control was now expected to cease.

Encyclopaedism versus autocracy

In its extension of imperial power over past, present and future law, Justinian's legal *Encyclopaedia* was exceptional, perhaps unique. The imperial autocrat had the power (at least in theory) to impose his own version of 'universality' on the entire body of Roman law, by excluding from it all material that he and his advisers held to be incompatible with current legal thinking or redundant for other reasons. In creating a systematic and organised body of legal knowledge, he left outside it all other texts, now reclassified as non-knowledge and banned from dissemination or use. The educational purpose of the *Encyclopaedia* was not merely advertised but enforced and its official use was confined to named centres of excellence, which also excluded the rest.

As the man responsible for the drafting of at least some and perhaps all of the laws, which empowered Justinian's assertion of his control over law, Tribonian was a party to the emperor's agenda. But he was also more than that, and his legacy would ultimately prove far more durable than that of his imperial master. For Tribonian, described by Tony Honoré as the 'Last Jurist', the purpose of the *Encyclopaedia* was different, the recording, in permanent and authoritative form, of the best of Roman jurisprudence, the application of practical wisdom to matters of 'right' (*ius*).⁵⁷ Like all his colleagues, Tribonian worked within the rule-based culture of the Byzantine bureaucracy, a culture which celebrated clarity and uniformity over controversy and diversity.⁵⁸ But unlike them, Tribonian revelled not only in the resolution of 'ambiguities', but in the juristic controversies themselves and the modes of argument, which gave rise to the controversies in the first place. Both the constitutions drafted by Tribonian for Justinian, and

⁵⁶ See Crook (1955). ⁵⁷ MacCormick (2001).

⁵⁸ For the evolution of legal writing in this direction, see Stein (1966).

the contents of the *Encyclopaedia* consistently record not only the ‘right opinion’ but also the grounds offered by the jurists for the divergent opinions, which required resolution.

It should therefore be no surprise that Justinian’s grandiose claims to ownership of all past law were discreetly subverted within the *Encyclopaedia* itself, which, we should remember, was now to count in its entirety as current law. In the *Constitutio Tanta*, Justinian, probably through the words of a quaestor who was not Tribonian,⁵⁹ paraphrased Salvius Julianus, ‘that most sophisticated of drafters of laws and the Perpetual Edict’, as his (or Justinian’s) authority for granting to emperors sole control of changes to the *ius honorarium*.⁶⁰ An alert reader of the law might have thought to cross-reference the citation, by checking it in the *Digest* itself. There he would have found the quotation in full, enshrining in law that not only emperors but jurists also had – still – the power to change the law through interpretation.⁶¹ That the learned jurist should prevail over the imperious autocrat was to be decisive in the preservation of the Roman intellectual heritage in the field of law. It is also confirmation that the concept of the encyclopaedia as an intellectual endeavour, rather than an exercise in power, could prove its resilience, even in challenging times.

⁵⁹ Tribonian was not quaestor at this stage, but may have received the job in recognition of his work on the codifications.

⁶⁰ *C. Tanta* 18. Julianus ‘declared in his books’ that ‘if any aspect of law were found to require explanation, this should be provided by imperial enactment’ (*si quid imperfectum inveniatur, sub imperiali sanctione hoc repleatur*).

⁶¹ *Dig.* 1.3.11: *Et ideo de his, quae primo constituuntur, aut interpretatione aut constitutionis optimi principis certius statuendum est*. The non-italics signal the crucial (and subversive) recognition of juristic interpretation. *Dig.* 1.3.12 compounds the problem by adding that judges too can take legal decisions (by implication without consulting the emperor first) by arguing by analogy from existing law.

9 | Late Latin encyclopaedism

Towards a new paradigm of practical knowledge

MARCO FORMISANO

Introduction

Within the wide spectrum of ancient ‘encyclopaedic’ works, an important though normally understudied strand is represented by Latin prose texts on technical subjects from the fourth through the seventh centuries CE. I shall first discuss several late Latin texts on ‘technical’ knowledge in different disciplines, comparing them to the preceding tradition of Roman ‘encyclopaedic’ thought (especially in Vitruvius and Pliny) and contextualising them from the broader perspective of both literary writing and the history of knowledge. I aim to show that the encyclopaedic writing of this period ascribes a new value to the communication of practical knowledge, accompanied by a corresponding downgrading of the importance of eloquence. In the final section of my paper, some passages of Augustine’s *De doctrina Christiana* are read and commented upon from this perspective in order to show how pervasive the new Christian rhetoric was, and how it also shaped this new understanding of the practical arts and the new language that was used to articulate it.

The technical disciplines and applied arts (*artes mechanicae*) do not merely represent a marginal aspect of the encyclopaedic project but play a central role in it. These disciplines make a distinctive contribution to ancient encyclopaedism by the way in which they provide new fields of investigation to supplement traditional high-status intellectual disciplines, but their presence also emphasises and intensifies the very process of itemising knowledge, a typical form of encyclopaedic aggregation in which “knowledge” is conceived of as an aggregate of discrete particles that are to be subjected to a process of analytical ordering.¹ This process of itemisation invites interpretation in the context of more general processes of dislocation and recontextualisation of knowledge which deeply marked late antique culture.² In this

I wish to express my deepest gratitude to the editors of this volume, to the anonymous readers for CUP, and to Craig Williams for his generous help as I revised my text.

¹ König and Whitmarsh (2007b) 35.

² Here I am using terms applied by Chin (2005) to Augustine’s concept of *grammatica* in *De doctrina Christiana*.

period, the kinds of knowledge and textuality stemming from the classical pagan tradition had to be harmonised with new cultural needs and trends, especially those expressed by Christianity; as a result, much of the content present in classical texts is extrapolated and dislocated into different texts and contexts which have the potential of radically changing their original significance. An obvious example is the *cento*, a poem constructed entirely of Virgilian lines or half-lines, but systematically shifting or even overturning their original meaning.

Moreover, attempts to systematise knowledge, especially within the encyclopaedic tradition, are often marked by a tension between disciplines closely associated with written knowledge and other fields still belonging to the uncoded and unwritten realm of practice. The latter form of knowledge tends to employ argumentative strategies which stress its distinctness from those arts which are traditionally based on theoretical, written codification. However, these argumentative strategies are at the same time heavily dependent on the rhetoric conventionally used to legitimise the more traditional arts. An illustrative parallel is provided by the *Recueil de planches* attached to the *Encyclopédie*, as described by Roland Barthes in an inspiring essay. These illustrations of the technical and practical arts within the encyclopaedic classification of knowledge make use of a certain rhetoric which, while contrasting on a superficial argumentative level with the establishment of culture (*artes liberales*), actually recreates a parallel universe which turns out to be just as detached from any practical reality as are those *artes*.³ In other words, I would argue that when we approach technical knowledge in its diverse textual forms, we should not limit our reading to the index of utility or applicability. Each of these texts not only has the aim of transmitting knowledge but also has its own rhetoric and, as Barthes puts it, its own *poetics*, both of which are at times entirely detached from the technical matter described.

A final prefatory note. It is perhaps important to remind readers that the literature of late antiquity still suffers from heavy prejudices, even though the period has been and is still very much the object of scholarly attention from an historical point of view. Textuality from the fourth through seventh centuries still represents the ‘most un-read period of European history’;⁴ this chapter is thus intended to be a contribution to a distinctly understudied area of late antique literature, namely the history of knowledge and intellectual history. Late antique culture was for a long time described with

³ Barthes (1972) 89–105.

⁴ Herzog (1977) 379. For a discussion of recent developments in late ancient literary studies see also Formisano (2007), Scourfield (2007) and Shanzer (2009).

the well-known ‘decline and fall’ paradigm. Scholarship in the second half of the twentieth century reacted strongly against that view. However, even quite recently it has been described as ‘a less rational era’,⁵ and concepts such as ‘irrationality’ and ‘anxiety’, supposedly characterising the late antique *Zeitgeist*, are implicitly invoked as explanations for why culture was reduced to a lower, more popular level.⁶ Here it is worth recalling the concept of the ‘democratisation of culture’ introduced by the ancient historian Santo Mazzarino, which still seems a valid if controversial tool for late ancient studies, especially with regard to the topic of this chapter.⁷ This concept aims to give a name to the phenomenon of a greater openness in cultural production, perceptible not only in texts but also in the visual arts and in religious belief. The concept of the ‘democratisation of culture’ also evokes the cultural reconfiguration which took place in late antiquity in connection with new trends propagated by Christianity, which on the one hand had the ambition of educating humanity in general, and on the other treated classical pagan cultural heritage as an instrument rather than as a goal in itself.

Roman encyclopaedism and practical knowledge

When considering the antique, and especially the late antique, phase of the history of encyclopaedism, the long-term history of this kind of text must be placed at the core of the discussion.⁸ And, although it might seem redundant to do so, it is worth recalling that the very term ‘encyclopaedia’ is problematic when applied to texts from antiquity and late antiquity;⁹ Jacques Le Goff rightly remarks that even in reference to the Middle Ages the term is not appropriate, and suggests instead ‘encyclopédisme’ or ‘esprit encyclopédique’.¹⁰ With all due caution, then, I generally use the term

⁵ Beagon (1992) 232.

⁶ For the anxiety paradigm see Dodds (1968); McMullen (1972) considers irrationality a cultural mark of late antiquity.

⁷ Mazzarino (1960). To be sure, the term is problematic: the essays in Carrié (2001) well describe the gap between Mazzarino’s itself somewhat opaque formulation and its subsequent use and abuse.

⁸ Cf. Meier (1994), who insists on the role of ancient and late antique texts in the formation of models for ‘technical’ writing in the Middle Ages: in particular 46–8.

⁹ Cf. Zimmermann (1994) 41, who compares ‘encyclopaedia’ with another early modern coinage, ‘utopia’, although the latter was invented in the sixteenth century by Thomas More and does not have any direct ancient equivalent. I would add further terms, even more problematic than ‘utopia’, such as ‘manual’ or even ‘technology’ and ‘art’.

¹⁰ Le Goff (1994) 24, where, like Zimmermann, he compares ‘encyclopaedia’ with other terms such as *travail* and *économie*; a few pages later (26–7) he points out that whereas for those

‘encyclopaedic’ in what follows, and the word ‘encyclopaedia’ only occasionally as a matter of convenience and convention.

In a seminal study on the transformations of ancient encyclopaedism during late antiquity, Jacques Fontaine argues that it would be incorrect to allege Christianity as the sole reason for change in this kind of text: both Augustine and Isidore, protagonists of the renewal, were heavily influenced by developments which had already taken place in the previous centuries.¹¹ It is thus appropriate to begin this discussion by looking very briefly at some characteristics of ancient (i.e. pre-late antique) encyclopaedism pertaining to practical knowledge.

The *artes mechanicae* and other disciplines connected with manual work and technical ability (such as agriculture, mechanics, or even architecture) have traditionally been seen by classical scholarship as marginalised within the ancient cultural system.¹² But these disciplines had actually already entered the world of Roman encyclopaedic knowledge *sensu lato* with Cato, who emphasises the role of agriculture for the formation of the *vir bonus*, the good citizen, and they ended up having an enormous influence in later ages.¹³ Other major steps in the Roman discourse of technology and its codification are represented by Varro, who in his *Disciplinarum libri* treats architecture and medicine along with the seven liberal arts,¹⁴ Vitruvius, Columella, Celsus and Pliny the Elder. In their works, often labelled as ‘encyclopaedic’, all of these authors, although in different ways and in relation to different fields, ask questions about the role of technology in terms of general culture and education. These texts have mainly been studied from a socio-political perspective that has emphasised the role played by the systematisation of knowledge (*ordo*) in the endorsement of the growing imperial power of Rome. But it is worth noticing that they also present a strongly formalised rhetoric which has to be analysed on its own terms and in connection with other texts. The extant books by Vitruvius and Pliny, in particular – as every compilatory work requires – are conceived in terms of the tension between two poles: *ordo* (‘order’), in other words the way in which authors present the mass of knowledge by showing the concatenation of various disciplines, and *utilitas* (‘utility’), i.e. the potential for practical

concepts one can find relatively proximal terms, for ‘encyclopaedia’ the semantic field is much more extended and complicated, as the diversity of titles demonstrates (*De ordine*, *De doctrina*, *Speculum*, *De philosophia mundi*, *Etymologiae*, *Origines*, *Imago mundi* etc.).

¹¹ Fontaine (1966) 519.

¹² On the pervasiveness of *technè* and *ars* within ancient cultures see Cuomo (2007) (‘Once you start looking, there is no getting away from it: you find technology *everywhere* in the ancient world’: 1). Cf. also Oleson (2008) and Meier (1994).

¹³ Cf. Sternagel (1966) and Meier (1994) 2. ¹⁴ Cf. the classic study by Ritschl (1877).

application. These two requirements, typical of the Roman discourse of science and cultural transmission,¹⁵ are more complex than one might expect at first glance and are intrinsically intertwined.

It has been rightly argued that modern scholars, thanks to the indeterminacy or semantic fluidity of the term, tend to describe as ‘encyclopaedias’ a wide variety of different kinds of texts and subgenres.¹⁶ As Codoñer suggests, as a minimum one can distinguish between two main types of encyclopaedic text.¹⁷ One is the ‘encyclopédie scolaire’, defined as an ‘ensemble des traits relatifs à diverses sciences ou arts’, having the function of an instrument for teaching and a rather static and normative character typical of classificatory works; among these are Varro’s *Disciplinarum libri* and Martianus Capella’s *De nuptiis Philologiae et Mercurii*. The other (of which one example is Pliny’s *Natural History*) is an ‘oeuvre qui traite de nombreuses sciences’, whose function is not propaedeutic but is to lead the readers to comprehension of the world, offering a complex and rich set of knowledge worthy in and of itself. In this kind of text, the order of the exposition is of fundamental importance, and in most cases it is thematic, since the principle of alphabetical order was still only very rarely used. These works were more subject to innovation and change, since their essence was to describe the world rather than to establish a set of rules for learning.¹⁸

On the basis of this twofold distinction, one might say that the keyword for the first kind of text is *utilitas*, for the second *ordo*. On closer scrutiny, however, the two criteria present themselves as tightly intertwined, since every encyclopaedic text combines a general philosophical view of the world and of knowledge (*imago mundi*) with implicit claims about the practicability of the described subject in extra-textual reality. This means in turn that a philosophical view of the world is very often presented in interaction with the material aspects of existence, i.e. with practical skills and technology.¹⁹ In any case, it is right to advocate a cautious reading of these texts and to be aware of a paradoxical aspect of the reception of ‘technical’ writing: who in fact are the real readers addressed by these authors? After all, the practical executors – farmers, artisans, soldiers – were in most cases incapable of

¹⁵ Murphy (2004) 13–4 puts emphasis on the Romanness of the process of offering an ordered and authorised version of knowledge. Cf. also Moatti (1997).

¹⁶ Codoñer (1991) 19.

¹⁷ Cf. introduction to this volume for related discussion. ¹⁸ Codoñer (1991) 20–2.

¹⁹ This aspect is especially present within medieval encyclopaedic texts such as the *Didascalicon* by Hugh of St. Victor, the *De natura rerum* by Thomas of Cantimpré, the *De proprietatibus rerum* by Bartholomaeus Anglicus and the *Speculum maius* by Vincent of Beauvais. Cf. Ribémont (1997) and the contribution of Elizabeth Keen in chapter 13.

actively participating in the process of learning through books because of their non-existent or very low levels of literacy.

Vitruvius constitutes perhaps the best example of a problematic contamination of the two kinds of Roman ‘encyclopaedia’ just described.²⁰ Callebaut has shown how the main purpose of the *De architectura* was to connect the author’s technical knowledge concerning architecture in its broadest sense with culture and human life in general, and accordingly with the *enkyklios paideia* programme and Roman processes of ordering knowledge: the ideal Vitruvian architect must master an impressive range of arts and competencies.²¹ Callebaut discusses some passages of Vitruvius’ epitomiser Cetus Faventinus (perhaps from the fourth century) in which the latter modifies the Vitruvian text by stripping it of every broader cultural connection, for example by limiting himself to giving technical information without any attempt to reproduce the original aetiological tales or the remote (pseudo-)historical causes of certain inventions.²² Pointing out that Vitruvius’ main preoccupation is to write a ‘useful’ work (the *utilitas* motif is found thirty-eight times), Callebaut nuances this key term of Roman literary culture, putting it in relation not only with practical applicability but also with the necessity of offering the reader a cognitive instrument for a general comprehension of the world understood as a harmonious system.²³ Precisely the kind of text which Vitruvius writes – unlike, for example didactic poetry – reveals an ‘encyclopaedic choice’.²⁴ In Vitruvius’ vision of architecture, nature is the ideal model, and he makes it an object of philosophical enquiry. His goal is less to elevate his discipline to the rank of the liberal

²⁰ It seems to me (and apparently also to Naas (2002) 41) that scholarship on Vitruvius has been more acutely aware of problems of language and genre than the scholarship on other Roman ‘encyclopaedists’. Cf. Romano (1997).

²¹ Cf. *De arch.* 1.1.3: ‘He should be a man of letters, a skilful draughtsman, a mathematician, familiar with historical studies, a diligent student of philosophy, acquainted with music; not ignorant of medicine, learned in the responses of jurisconsults, familiar with astronomy and astronomical calculations’ (*et ut litteratus sit, peritus graphidos, eruditus geometria, historias complures noverit, philosophos diligenter audierit, musicam scierit, medicinae non sit ignarus, responsa iurisconsultorum noverit, astrologiam caelique rationes cognitatas habeat*). On this ‘encyclopaedic programme’ see Romano (1987) 59–75.

²² Callebaut (2000) 205–6. On the role of *historiae* (‘historical tales’) as a binding factor between technical knowledge and literature for Vitruvius, see Romano (1987) 88–101.

²³ Cf. *De arch.* 1.1.1: *architecti est scientia pluribus disciplinis et variis eruditionibus ornata, cuius iudicio probantur omnia quae ab ceteris artibus perficiuntur opera*; and 4, preface 1: *dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere*. See also Callebaut (1997) 171, who defines Vitruvius’ *corpus* ‘comme organisation méthodique d’un inventaire scientifique et technique, à vocation didactique et de large ambition épistémologique’.

²⁴ Callebaut (2000) 208. The term is to be found already in Romano (1987) (Chapter 2: ‘La scelta enciclopedica’).

arts than it is to present architecture as a worthy part of the encyclopaedic programme.²⁵ This implies an attitude toward the reader which incisively illustrates the importance of ‘technology’ in Roman culture and society.²⁶

Pliny’s immense *Natural History* presents analogous approaches to culture, but from a much broader perspective. The knowledge of nature is the subject here (although the underlying concepts and methods do not entirely correspond to those of modern scientific inquiry).²⁷ As in the case of Vitruvius, the Plinian undertaking is devoted to putting order into the vast field of human knowledge, i.e. of books, exhuming and transmitting every single element perceived by his omnivorous *curiositas*. As Conte says, the *Natural History* can be described as an ‘encyclopaedia’ in the specific sense that the author does not have to envision every possible application of his work and leaves it ‘open’ for any kind of readability and practicability. Notably this aspect also ends up affecting our perception of the author of the *Natural History*: he becomes a reader himself, i.e. a member of his own audience.²⁸ Pliny’s text presents itself as polyphonic, and the process of itemisation of knowledge responds to a precise rhetorical strategy which has been defined as *enumeratio caotica*.²⁹ As Murphy notes: ‘There is more than one “Pliny”, that is, more than one perspective on Nature authorized by the text. Any reading that isolates a single passage from the *Natural History* and says of it “this is what Pliny thought in his heart” risks limiting what is really a many-voiced text.’³⁰ Furthermore, the totality of the diverse data reproduced in the book is always aimed at discovering a cosmic, sometimes hidden, sympathy between individual things and the universe as a whole.³¹ Precisely this can be described as the core of the ancient ‘encyclopaedic’ programme and will continue to play an important role in the making of medieval and early modern encyclopaedism.³²

²⁵ Callebaut (1997) 180.

²⁶ The other Roman encyclopaedia was the *Artes* of Cornelius Celsus, living under Tiberius, treating both practical knowledge (medicine, agriculture and art of war) and theoretical (oratory, jurisprudence and philosophy). Of this work only the books *De medicina* have survived.

²⁷ The point might seem banal, but it is still worth emphasising; Healy (1999), for example, argues for a fundamental continuity between ancient and modern science and technology. For a discussion of the Plinian concept of *natura* see Beagon (1992) and Naas (2002) 62–6.

²⁸ Conte (1991) 99.

²⁹ Conte (1991) 100. Murphy (2004) 38–40 speaks of an aesthetic of ‘intricacy’.

³⁰ Murphy (2004) 10–11. ³¹ Cf. Conte (1991) 122–3 and Murphy (2004) 45–8.

³² It has been argued that a sympathy, even an obscure relation between things, is a characteristic of Renaissance encyclopaedic thought (cf. Murphy (2004) 45, citing Foucault). The Foucauldian assertion has been confirmed by several studies which emphasise the philosophical conceptualisation behind early modern encyclopaedism. See for example Dierse (1977), Schmidt-Biggemann (1983) (bearing the title of *topica universalis*) and Leinkauf (1993) (*mundus combinatus*).

On the other hand it is also worth noting that, especially in the prefatory epistle, Pliny's rhetoric emphasises the role of practical skills: consider the affirmation that this text is meant to be read and used even by the *humile vulgus* (preface 6: 'They are written only for the common people, for farmers or mechanics, or for those who have nothing else to do'; *humili vulgo scripta sunt, agricolarum, opificum turbae, denique studiorum otiosis*) a remark by means of which Pliny situates – or rather, pretends to situate – the *Natural History* beneath the level of the liberal arts included in the *enkyklios paideia*.³³ But still, for all the reasons that have been mentioned, especially because of its all-comprehensive philosophy of universal knowledge, this text responds to ways of conceptualising practical and technical knowledge which are typical of Roman 'encyclopaedic' works, in particular the second type described by Codoñer. As Murphy puts it:

It is crucial (...) to recognize the essentially undidactic nature of the *Natural History*. Though it claims to transmit *enkyklios paideia*, it does not teach the seven liberal arts of the later educational canon, or anything that even resembles them. Certain portions, mostly of the arts of agriculture, transmit practical lessons, but 'how to' is not a large part of the *Natural History*'s *raison d'être*.³⁴

New texts, late antiquity

So far I have tried to offer a short outline of the problematisation of technical knowledge within Roman encyclopaedic thought: in Vitruvius and Pliny, the two characterising criteria of *ordo* and *utilitas* are interdependent. The reader of their work is constantly confronted with a dynamic approach to the system of the liberal arts, and with an attempt to reconceptualise this system – each author following his own rhetorical and argumentative strategy by trying to elevate practical or technical skills to the level of the *enkyklios paideia*. In what follows I will not be discussing works which identify themselves as 'encyclopaedic' in the sense that Vitruvius' or Pliny's texts do. My aim here is rather to explore the field of 'technical literature'

³³ For a careful discussion of this problematic passage see Naas (2002) 47–53.

³⁴ Murphy (2004) 211, who, however, continues: 'There is an important distinction to be observed here: its goal and methods set the *Natural History* apart from the great majority of other Roman technical writings, the non-literary texts with which it is usually classed. It is the favourite profession of most of these books to be able to endow their readers with mastery over a particular field or fields.' This seems to ignore the rich debate on 'technical literature' over the last years, which has tended to nuance the role of the text as something more than a mere transmitter of practical information, and to emphasise its rhetorical and literary aspects. See further Naas (2002) 41–6, where terms such as *Lehrbuch* and *Sachbuch* are discussed.

within late Latinity on its own terms, without entering the debate about encyclopaedic classification of knowledge, and to contextualise it in the broader literary and cultural frame of an epoch fascinated with the process of innovation through tradition.³⁵

Late antiquity has given us a series of texts on several aspects of practical or technical arts which had an enormous influence on the medieval and Renaissance history of knowledge.³⁶ Between the fourth and the sixth centuries an astonishing amount of every kind of what we today call 'technical literature'³⁷ was produced, and much of this – especially in fields like medicine, veterinary and military science – has survived. This very point should cause us to reflect upon the importance of this kind of text in the late Roman cultural system. In that age, much more than in preceding eras, practical knowledge, which was normally transmitted orally, now needed to be codified and transmitted in written form. To apply the terminology of Foucault's *Archaeology of Knowledge*, in the late antique period these fields more clearly 'emerge' at the level of cultural production, in connection with a range of new factors like the formation of new idioms for articulating technical knowledge, the rise of new genres and the consolidation of the self-confidence of the authors.³⁸ But in order for this to happen, a new kind of written language first had to take shape, one that tended to privilege direct practicality over form, i.e. over rhetorical expression, and in these late antique works the reader is constantly made aware of the stylistic choice made by the authors, who explicitly discuss and problematise the question, normally in their prefaces.

The rhetoric of these texts aims to put emphasis on the process of teaching how to do something through writing, how to put written knowledge into practice. This very aspiration towards a new kind of writing represents a major innovation, and it entails some paradoxical elements.³⁹ Authors

³⁵ Here I am taking up some of the arguments I presented in Formisano (2001), to which I refer the reader for further bibliography.

³⁶ Cf. Bischoff (1971), Whitney (1990) and Meier (1994).

³⁷ 'Technical' literature remains a problematic definition, since it does not correspond to ancient literary culture and aesthetics. A similar problem is presented by the German term *Fachliteratur*, programmatically used in the scholarship and never questioned; cf. Formisano (2004).

³⁸ Cf. Foucault (1969).

³⁹ Assmann (1992) 20 introduces a distinction between 'cultural' and 'mimetic' memory, the latter including the transfer of practical knowledge. He argues: 'We learn action through imitation. The use of written guides to action – such as instruction manuals, cookbooks, or construction manuals – is a relatively late development and one that never becomes universal. Action can never completely be codified. Entire areas of everyday action, of custom and usage, are still based on mimetic traditions.'

aim to write their works in a language that is not necessarily subjected to the traditional system of *eloquentia*.⁴⁰ According to Aristotle (*Rhetoric* 1 1355b25) and Cicero, there is a major difference between eloquence and other *technai* or *artes*: the latter have their own particular field of application, but the former is a universal knowledge. ‘Speaking well’, writes Cicero in *De oratore* 2.5, ‘is not confined by the boundaries of any fixed area. Anyone who claims to have this power must be able to speak well about everything that can possibly fall within the scope of human discussion’ (*omnia quaecumque in hominum disceptatione cadere possunt*).⁴¹

These authors try to escape the difficulties associated with an elaborate literary language in order to write a text accessible to most readers and directly usable in extra-textual reality; such texts are often called ‘manuals’, although this too is a modern term which does not exist in Latin.⁴² This is what we read, for example, in Theodorus Priscianus’ medical treatise *Euporista*, which has a close relationship to Pliny’s *Natural History*.⁴³

It is fairly well known that not long ago I wrote some books on easily procurable medicine at the urging of my colleague Olympios; I wrote them in Greek since that people has spread abroad the discipline of healing in their clear language. In the present volume, therefore, I will not aim for glory and indeed in a scholarly work there is no need of eloquence, but of industry. Since the weakness of the human body demanded remedies, I decided to write them up, nature allowing me to do so with its swift cures. For not every illness permits a delay in the cure. Therefore, my dear friend, the remedies which by the agency of nature assist in the adornment of our bodies or in the obtaining or maintaining of health, I have now arranged in our language in your honour – not, I imagine, without gaining some fame. After all, a work composed in both languages will have a greater number both of witnesses and of judges. (*Euporista* 1.1)⁴⁴

We find similar sentiments in the preface to the anonymous *De rebus bellicis*:

⁴⁰ Formisano (2001) 62. ⁴¹ Translation by May and Wisse (2001). Cf. Narducci (1994) 10.

⁴² On ancient ‘manuals’ see Fuhrmann (1960), which still represents the most complete study. An update is needed.

⁴³ Cf. Formisano (2004).

⁴⁴ *Nuper me collegae Olympii exhortatione provocatum nonnullos confecisse praesentaneae libellos medicinae vel mediocris fama retinet, sed graeco stylo quoniam medendi industriam sermone claro haec natio publicavit. In his igitur voluminibus non studium tenebo gloriae, neque enim in logico opere eloquentia opus est sed labore. Quippe quae fragilitas humani corporis remedia flagitaret, celeribus beneficiis natura consentiente composui. Non omnis enim validudo medendi patitur tarditatem. Quapropter, amice carissime, quae ornatui nostri corporis vel saluti procurandae custodiendaeque obveniat opis naturae remedia, nunc in tuam gratiam nostro sermone digessi, non sine lucro famae et arbitror. Effectum enim in utroque genere opus tam plures testes habebit quam iudices.*

And so from time to time, those who have been shown to view anything correctly must be called in; for as an excellent orator says, ‘The greater part of mankind has immediate recourse to the man whom nature has endowed with the faculty of thought’. In this, one must consider what a man thinks rather than says; for everyone agrees that neither the loftiest birth nor the abundance of wealth nor the influence proceeding from public positions nor eloquence acquired in study has led to improvements in the arts (in which the invention of military equipment has its place also), but intellectual capacity alone, which is the mother of all excellences, and depends on a happy accident of nature. (*De rebus bellicis*, preface 5–6)⁴⁵

This aspiration to achieve a more ‘practical’ language is combined with another ambition: to reach by means of one’s own written work the largest possible number of readers, including those belonging to the lower classes, the *humiliores*. Consider this passage from Vegetius’ *Mulomedicina*:

Having begun to arrange writings (*commentarii*) on veterinary medicine, I was interrupted by the frequent complaint of my fellow citizens and friends, who were lamenting the illness and death of cattle, which brought them great losses; and they insisted that I publish anything that could be found written in books concerning the health of such useful animals. Thus I granted this very legitimate request of my friends, gathered elements extracted from various authors, and put them down into this small book in simple language (*pedestri sermone*). This book’s greatest success will be if the scholar does not scorn it and the rustic cowherd (*bubulcus*) understands it. (*Mulomedicina* 4, preface 1–2)⁴⁶

And from Palladius’ *Opus agri culturae*:

It is the first part of prudence to make a judgement about the person to whom you are going to give instruction. The author (or ‘instructor’: *formator*) should not, after all, imitate the techniques of the farmer and the eloquence of the rhetorician. Yet this is precisely what many have done: by speaking eloquently to uneducated peasants, they bring it about that what they are teaching cannot be understood even by extremely eloquent people. But let me not prolong this preface any further, lest

⁴⁵ *Ergo nonnumquam invitandi sunt, qui recte quicquam sentire fuerint approbati: nam ut ait optimus orator, ad illum maior pars hominum decurrit quem ingenio natura donaverit. In qua re est considerare semper quid unusquisque magis sentiat quam loquatur; constat enim apud omnes quod nec summa nobilitas nec opum affluentia aut subnixae tribunalibus potestates aut eloquentia litteris acquisita consecuta est utilitates artium, in quibus etiam armorum continetur inventio; sed ingenii tantummodo magnitudo, quae virtutum omnium mater est, naturae felicitate subnixa.*

⁴⁶ *Mulomedicinae me commentarios ordinante civium ac amicorum frequens querela accepti operis continuationem suspendit, deflentium aegritudines mortes damnosissimas boum, cum magnopere peterent publicandum, si quid pro salute tam commodorum animalium scriptum reperiretur in libris. Cedens itaque familiarium honestissimae voluntati ex diversis auctoribus enucleata collegi pedestrique sermone in libellum parvissimum contuli; cuius erit praecipua felicitas, si eum nec scolasticus fastidiat et bubulcus intelligat.*

I be guilty of imitating those whom I am criticising. (*Opus agri culturae*, preface 1.1.1)⁴⁷

Previous writers in analogous fields sometimes did contemplate the possibility of being read by members of the lower classes. But we should not forget that literacy was in general a privilege of the upper classes and that the written word in antiquity tends *ipso facto* to be ‘literature’, i.e. to refer to the literary system. Much of the ‘crowds of farmers and mechanics’ (*turba agricolarum et opificum*) of Pliny’s prefatory letter to Titus did not have access to the written word. This paradox ends up becoming a mark of the genre in late antiquity and leads to a new tension within the mechanisms of transfer of technical knowledge. It is interesting, moreover, to notice how difficult the process of expanding the readership of these texts was: if one looks at the long run of the history of practical encyclopaedism, one sees that during the Middle Ages until approximately the thirteenth century, there was no encyclopaedic work which included the *artes mechanicae*, and one has to wait until the early modern period for works which explicitly designate as their addressees an audience that was not highly cultivated.⁴⁸ The *Encyclopédie*, of course, represents the crowning moment of this complicated process of legitimisation of technical and practical knowledge.

To return to late antique texts: a set of specific discursive ‘tools’, so to speak, are very widely used in order to emphasise the claim to independence from the hegemonic literary system. In nearly every one of these works we find terms referring to this process: *utilitas*, *sollertia*, *diligentia*, and *dissimulatio*. Each of these terms is, of course, already present in the preceding textual tradition (as we have seen in the case of Vitruvius in particular), but in this period, I suggest, they are strengthened, with the result that the transfer of ‘technical’ knowledge is formalised and established as a discourse in its own right (in the Foucauldian sense of a field of knowledge, a knowable object).⁴⁹

Not surprisingly, *utilitas* is a central concept that can assume several meanings and functions. This is the word used when the author wants to emphasise that the principal characteristic of his work is not an elegant and

⁴⁷ *Pars est prima prudentiae ipsam cui praecepturus es aestimare personam: neque enim formator agricolae debet artibus et eloquentiae rhetoris aemulari, quod a plerisque factum est, qui, dum diserte loquuntur rusticis, adsecuti sunt ut eorum doctrina nec a disertissimis possit intellegi. Sed nos recidamus praefationis moram, ne quos reprehendimus imitemur.*

⁴⁸ Meier (2002b) 528–9 cites the example of the German encyclopaedist Samuel Siderocrates, author of the *Cyclopaedia Paracelsica Christiana* (1585), defined as an ‘anti-humanistische Kampfschrift’ because of its orientation towards culturally modest people, such as salesmen, tailors and masons.

⁴⁹ Cf. Formisano (2001) 29–31.

eloquent style, but the aspiration to direct applicability. In a more subtle way, *utilitas* is also a text-immanent self-justification, since it precisely justifies the existence of the text itself: these texts are in most cases epitomes both of other treatises and of personal experiences, and *utilitas* is at the basis of this written codification. The very fact that a text affirms and emphasises its own utility not only refers to extra-textual applicability within a given technical procedure, but also, and more importantly, makes a claim on the text's own textual quality, represented as different in kind from that of other works. In some cases it is also instrumental to the relationship of the author with the established powers: for example, in military treatises such as Vegetius' *Epitoma rei militaris* and the anonymous *De rebus bellicis*, the emperor is offered the possibility of achieving success in the present and glory in future generations, if he only follows the precepts contained in the text. *Sollertia* concerns the method followed by the author in his work. The term refers to the careful collection of information from both the oral and the written tradition, and the equally careful presentation and arrangement of this material for the reader. By means of an appeal to *sollertia* the author can argue against the 'eloquentia system', implying that it is no longer the only possibility for the transmission of knowledge. *Diligentia* and *dissimulatio* are terms already present in texts of previous ages, especially in the classical rhetorical tradition (see for example Cicero's *De oratore*), but they assume a new value in the context of late antique technical literature. The first term denotes the great care and intellectual commitment of the author in enquiring into traditions of the past, searching for true and indispensable knowledge; the second refers to methodological error and bad faith in concealing knowledge out of self-interest or simply neglect. This constellation of terms illustrates a well-formalised conceptual network on which scientific and technical literature of the late antique period is based.

In short: whereas, as we have seen, Varro puts medicine and architecture at the margin of the liberal arts, and Vitruvius aims to promote his discipline to the rank of the other *artes liberales* by adapting architecture to the hegemonic cultural system and appealing to Ciceronian argumentative strategies in order to show how architecture is indispensable to civilisation, as eloquence is for Cicero,⁵⁰ it is my argument that late antique technical culture tends to proclaim its independence from the dominion of *eloquentia*. This shift can be seen as a part of a wider change in the conception of human knowledge and, as we will see below, language itself – a change

⁵⁰ Cf. Romano (1987) 70–2.

which occurs in conjunction with the rise and expansion of the Christian religion, especially through the theorisation of Christian thinkers engaged in creating a new intellectual style that is able to negotiate with both the classical pagan tradition and the bible. In the area of encyclopaedic thought in particular, it is interesting to notice a radical change. As we have seen, the *artes liberales* were considered within Roman encyclopaedism since Varro's time as an object of knowledge worthy in themselves. To be sure, this point was already questioned by Seneca, who denies an absolute theoretical status to the *disciplinae* and considers them as merely propaedeutic instruments supporting the search for true knowledge, the Stoic *sapientia*: 'it is not because they can bestow virtue, but because they prepare the soul for the reception of virtue' (*non quia virtutem dare possunt, sed quia animum ad accipiendam virtutem praeparant*, *Epistulae* 88.20). Nonetheless, encyclopaedic works continued to assert the self-sufficiency of the liberal arts until late antiquity. Codoñer reminds us that even Martianus Capella's *De nuptiis Philologiae et Mercurii* (fifth century) corroborates this trend, since this work demonstrates how mastery of the *artes liberales* ensures and embodies an ideal of culture. Martianus' text comprises nine books in prose with frequent verse insertions, thereby recalling the genre of Menippean satire associated with Varro. In the first two books (the *fabula*) the reader is told why Mercury chooses Philology as his spouse; the remaining books are devoted to the presentation of the seven liberal arts.⁵¹ Interestingly enough, Martianus does not include medicine and architecture in his system, as Varro had done; he wants to emphasise the high theoretical status of the liberal arts, regaining for them the privileged position over other arts or skills.⁵²

Martianus' work represents in this sense a vestige of the classical pagan tradition, which has been put under scrutiny by Christian intellectuals who conceive of the *artes* as instruments suited for training human reason. The true goal of the latter is to acquire knowledge of superior and extra-sensual reality; thus Seneca's argument returns with a difference: *sapientia* is substituted by the knowledge of God. On the practical level of the teaching and learning process, the liberal arts are now on the same level as any other kind of practical knowledge or skill. This process of readjustment of the

⁵¹ Recent editions include Ramelli (2001) for the entire work, Guillaumin (2003) (Book 7), Ferré (2007a) (Book 4) and Ferré (2007b) (Book 6).

⁵² Codoñer (1991) 24. For a critical discussion on the formation of the canon of the *artes liberales* during late antiquity, including an overview of the major steps in the debate (i.e. Ritschl (1877) and Hadot (1984)), see Shanzer (2005), whose main argument is that Augustine's *Disciplinae* followed Varro's work of the same name; neither text has survived.

traditional conception of culture and education, I would argue, leads to a redefinition of the role of the practical arts, whose discourse takes the opportunity to reshape itself and gain a new status within the cultural context of early Christianity, within the 'Christian discourse' described by Averil Cameron.⁵³

Toward a new rhetoric of practical knowledge

The subtlety and nuance of Christian discourse within late antique culture has been the object of much study. I would like to emphasise that in considering the influence of this discourse on literary aesthetics, one should consider also its implications for the history of knowledge; in this final section, I will briefly consider a fundamental text of the Christian discourse which plays a central role within the broader context of the development of cultural transmission in late antiquity: Augustine's *De doctrina Christiana*.⁵⁴

Written in two different phases of Augustine's life – the first three books around 396 and the fourth almost thirty years later – *De doctrina Christiana* engages in a thorough revision of pagan classical culture under the spell of Christian hermeneutics, semiotics, aesthetics, and rhetoric.⁵⁵ I cannot here dwell on the structure and intent of this complex work; instead, I would simply like to emphasise the fact that we can read a Christian text without necessarily engaging in theological or doctrinal interpretation. Indeed, it has been argued that the term *doctrina* in Augustine's title is polyvalent, and has the broader meaning of 'teaching' or 'instruction' rather than the narrow sense of 'doctrine'.⁵⁶ This consideration suggests that Augustine had in mind a large audience, not just clerics and scholars of the bible.⁵⁷ This is an important point, especially when we consider that the central theme of this work is precisely the revision of the encyclopaedic programme of the *artes*, which had engaged Augustine in his early years.⁵⁸ As has been argued, both pagans and Christians respond to the same late antique context by using similar language but in different ways,⁵⁹ and *De doctrina Christiana* shows, in a highly sophisticated manner, how language has been recast in a

⁵³ See Cameron (1991). ⁵⁴ Cf. Arnold and Bright (1995) and Pollmann and Vessey (2005).

⁵⁵ Cf. Pollmann (1996) 67.

⁵⁶ For detailed discussion of all possible meanings, see Pollmann (1996) 104–8. Cf. the Italian edition (Simonetti (1994)) which translates with 'L'istruzione cristiana' and the English one (Green (1997) 'Christian teaching').

⁵⁷ Cf. Simonetti (1994) xiv and Pollmann (1996) 69–75 for a different thesis.

⁵⁸ Of Augustine's *Disciplinae*, only the *De musica* survives. Cf. Van Fleteren (1995), esp. 15 and 19.

⁵⁹ Cameron (1991) 7.

new interpretation of knowledge and of the world. It is my argument that this text can also be read in connection with the rise of a new understanding of practical knowledge.⁶⁰

In the prologue, Augustine argues for the necessity of teaching in every field of knowledge, especially of course in the bible. Teaching, he argues, responds well to human charity, and to the love between men that is required by the Christian religion; knowledge must be shared ‘without pride or envy’ (*sine superbia et sine invidia*, preface 5).⁶¹ While in the first three books he is concerned with the *modus inveniendi*, i.e. the ‘way of finding what needs to be understood’ (4.1: *modus inveniendi quae intellegenda sunt*),⁶² in the fourth book he turns to *modus proferendi quae intellecta sunt*, the way of expressing or setting forth what one has already understood. In this book, then, he is particularly interested in discussing the role of rhetoric and eloquence in the teaching and learning process; and here he adopts a totally new strategy. Eloquence no longer represents the highest cultural standard; a *vir bonus* no longer needs to be *dicendi peritus*.⁶³

At the outset I must curb the expectations of any readers who think that I am going to present the rhetorical rules which I learnt and taught in pagan schools, and warn them in this preamble not to expect that sort of thing from me. This is not because the rules have no practical use, but because such practical uses as they do have must be learnt separately – assuming that a person of good character has the time to learn them on top of everything else – and not sought from me either in this or any other work. (*De doctrina Christiana* 4.2)⁶⁴

Furthermore, Augustine remarks, eloquence does not require a long period of learning; it is in fact a matter of *consuetudo*. One learns to speak well by reading and by listening. No one who is a good speaker will be thinking of applying various rhetorical rules while he is speaking: *implent quippe illa, quia eloquentes sunt; non adhibent, ut sint eloquentes* (4.4: ‘they apply the rules because they are eloquent, not in order to be eloquent’). Here Augustine not only breaks with the classical Roman tradition, which assigned to eloquence the most important role in cultural and social life,⁶⁵

⁶⁰ To my knowledge this connection has never been made in the scholarship.

⁶¹ On the structure of the prologue see Pollmann (1996) 108–21.

⁶² All translations are from Green (1997). ⁶³ Cf. Pollmann (1996) 233–4.

⁶⁴ *Primo itaque expectationem legentium, qui forte me putant rhetorica daturum esse praecepta, quae in scholis saecularibus et didici et docui, ista praelocutione cohibeo atque ut a me non expectentur admoneo; non quod nihil habeant utilitatis, sed quod si quid habent seorsum discendum est, si cui fortassis bono viro etiam haec vacat discere, non autem a me vel in hoc opere vel in aliquo alio requirendum.*

⁶⁵ Cf. Cicero, *De oratore* 1.51: ‘Whatever be the subject of a speech, therefore, in whatever art or branch of science, the orator, if he has made himself master of it, as of his client’s cause, will

but he also rescinds the identification of theory with practice and relegates eloquence to the status of a natural talent which one cannot attain by study alone. In short, *sapientia* does not necessarily correspond to *eloquentia*.⁶⁶

As for the person who wants to speak eloquently as well as wisely – it will certainly be more beneficial if he can do both – I would be happier to refer him to eloquent speakers so that he can read their works, listen to their words, and practice imitating them, than to recommend that his time be spent on teachers of rhetoric, provided that those whom he will read and listen to are reliably said to be, or to have been, wise speakers as well as eloquent ones. (*De doctrina Christiana* 4.8)⁶⁷

Introducing his teaching methodology, Augustine later contrasts eloquence with clarity: *non curante illo qui docet quanta eloquentia doceat sed quanta evidentia* (4.23: ‘since the teacher is concerned not with the eloquence of his teaching but its clarity’),⁶⁸ and he elsewhere observes that *diserte dicere* does not correspond to *vere dicere*:

But the speaker who is awash with the kind of eloquence that is not wise is particularly dangerous because audiences actually enjoy listening to such a person on matters of no value to them, and reckon that somebody who is heard to speak eloquently must also be speaking the truth. (*De doctrina Christiana* 4.7)⁶⁹

Augustine’s arguments point to a larger issue. Christianity and late antique culture made a highly significant contribution to the formation of a new kind of written language, one which no longer necessarily requires the writer to be ‘eloquent’.⁷⁰ This reduction of the role of eloquence and ‘re-evaluation of content’⁷¹ seems to be a strong characteristic of a large sector of late antique culture. If we consider this aspect in conjunction with the growing interest in transmitting and applying knowledge through teaching,

‘speak on it better and more elegantly than even the very originator and author of it can’
(*quicquid erit igitur quacumque ex arte, quocumque de genere, orator id, si tamquam clientis causam didicerit, dicet melius et ornatus quam ipse ille eius rei inventor atque artifex*).

⁶⁶ Cf. Pollmann (1996) 233.

⁶⁷ *Porro qui non solum sapienter verum etiam eloquenter vult dicere, quoniam profecto plus proderit si utrumque potuerit, ad legendos vel audiendos et exercitatione imitandos eloquentes eum mitto libentius, quam magistris artis rhetoricae vacare praecipio, si tamen hi qui leguntur et audiuntur, non solum eloquenter sed etiam sapienter dixisse vel dicere veraci praedicatione laudantur.*

⁶⁸ On this passage see Pollmann (1996) 227.

⁶⁹ *Qui vero affluit insipienti eloquentia, tanto magis cavendus est, quanto magis ab eo in his quae audire inutile est delectatur auditor et eum, quoniam diserte dicere audit, etiam vere dicere existimat.*

⁷⁰ In a chapter with the title ‘Showing and Telling’, Cameron (1991) refers to a more referential and ‘ostensive’ style of language used by Christian intellectuals.

⁷¹ Pollmann (1996) 229 (‘starke Reduzierung des traditionellen Systems der Rhetorik’) and 244 (‘Wiederaufwertung des inhaltlichen Anliegens’).

promulgating, and vulgarising, we will perhaps see the massive production of 'technical' literature in late antique times from a different perspective. The pages of *De doctrina Christiana* show us in a quite marked way the passage to another cultural system, one which elaborated a different relationship with past traditions and which developed new ways of expression, different from those of the past. As Pollmann has recently suggested: 'Augustine's hermeneutics becomes a kind of "meta-method" or "meta-discipline" embracing all other disciplines by indicating their instrumental service for understanding the Bible'.⁷² It is worth noting that the rhetorical and linguistic shift which I have presented sketchily on the basis of Augustine has implications for literature, rhetoric, and hermeneutics as well as for the history of knowledge. It is important to appreciate the new conceptualisation of literary language, not simply dismissing it as a sign of cultural decline but analysing it from a broader perspective.

Finally, as is well known, Isidore of Seville represents the most important step in the evolution of late ancient encyclopaedism. For him, Augustine's *De doctrina Christiana* was a *livre de chevet* accompanying his encyclopaedic adventure in the *Etymologiae*. For Isidore, the most important aspect of Augustine's heritage was that of offering a useful work to the fellow Christians of his time, especially through a reduction of the theoretical aspects of the *artes liberales*.⁷³ However, as Henderson reminds us, Isidore's work is not only an encyclopaedic text but also a very complex construction regulated by a sovereign control of the Latin language and a strong sense of order.⁷⁴ Once again the two encyclopaedic criteria, *ordo* and *utilitas*, cannot be completely separated from each other.

The aim of this chapter has been to show how the late antique culture of technology has several original aspects which need to be seen from an interdisciplinary perspective: the tendency to codify practical knowledge in an appropriate written form; the birth of a certain confidence on the part of the technician; the emphasis on practicality and clarity in the process of learning. Putting this cultural renewal in relationship with that of subsequent periods in the history of knowledge, we can read late antiquity as an important moment in the development of the cultural appreciation of practical arts, a development which will culminate with the *Encyclopédie*, the *Dictionnaire raisonné des sciences, des arts et des métiers*. Late antiquity has very rarely been seen as a time for productive innovation and creation of new models, and when this period has been seriously taken into consideration in order to trace the development of discourses of technology, only a

⁷² Pollmann (2005) 220.

⁷³ Cf. Fontaine (1966) 533.

⁷⁴ Henderson (2007a).

limited number of issues has been investigated.⁷⁵ I am not arguing here for the direct influence of these texts on later authors, but simply wish to draw attention to an original cognitive style that scholars normally attribute only to later ages but that, I suggest, we can already find *in nuce* in late antique culture. History does not, of course, always follow a straight line of unbroken progress, and I would argue that late antiquity demonstrates this in an exemplary way: it suggests a different path that might have been taken in the history of knowledge.

⁷⁵ Consider, for example, Long (2001): her book investigates ‘the cultures of knowledge – whether knowledge is open or secret; which topics become the focus of written authorship and why; when and in what contexts people consider knowledge to be property; and what they take knowledge to be’ (1). Long is also interested in observing ‘which practical and craft cultures have interacted with learned traditions’ from Greco-Roman antiquity to the early seventeenth century. Long is arguing that after a season of ‘open knowledge’, when authors like Vitruvius and Pliny rendered knowledge accessible, late antiquity turned from openness to secrecy. She finds the justification for this attitude toward secrecy in the general ‘move away from Roman civic concerns to more intimate and private groups and to spiritual preoccupations’ (70). In doing so she refers to three kinds of texts and traditions which illustrate these esoteric trends: neoplatonic philosophy, esoteric knowledge and magical and alchemical texts. I would suggest instead that we take into account those texts which stand in the tradition of Vitruvius or Pliny, such as late antique military or medical treatises; as I argue in this chapter, these texts represent a moment of innovation within a process of cultural transmission, to be put in relation to the ‘democratisation of culture’ during late antiquity (cf. n. 7), thus, surprisingly, anticipating later developments in the history of knowledge in the early modern period.

PART II

Medieval encyclopaedism

10 | Byzantine encyclopaedism of the ninth and tenth centuries

PAUL MAGDALINO

Encyclopaedism was an ongoing phenomenon throughout the eleven hundred years of Byzantine history in two senses. Firstly, *enkyklios paideia* was the name used to characterise the basic secondary school curriculum; this in theory provided an ‘all-round education’ in the liberal arts, although in practice the *enkyklios* often consisted of little more than a heavy diet of grammar with smatterings of other subjects, from which only the more committed students would go on to study rhetoric and philosophy in depth, along with elements of the mathematical *quadrivium*.¹ Secondly, Byzantine culture was permanently encyclopaedic in the sense that it was continually collecting, summarising, excerpting and synthesising earlier texts. Most of this activity was religious and geared to theological controversy and ascetic devotion. But there were times when it extended into the sphere of secular learning. The most significant of these times was the period of renewed cultural production in the ninth and tenth centuries that is sometimes called the Byzantine Renaissance, or the Macedonian Renaissance, after the dynasty that came to power in 867 with Basil I from Adrianople, which was then, confusingly for us, the capital of the administrative circumscription known as Macedonia.

The notion of Byzantine encyclopaedism in this period is indissolubly associated with the third Macedonian emperor, Basil I’s grandson Constantine VII, or Constantine Porphyrogenitus, who in his sole reign from 945 to 959 oversaw a number of collecting and excerpting projects. The idea that encyclopaedism was the literary *Leitmotiv* of the age, and that Constantine VII was the key figure in promoting it, was classically formulated by Paul Lemerle in his book *Le premier humanisme byzantin*, still unsurpassed as a survey of Byzantine learning in the early Middle Ages.² Lemerle’s last chapter is entitled ‘The Encyclopedism of the Tenth Century’

This article overlaps substantially with two others in recently published volumes: ‘Orthodoxy and history in tenth-century Byzantine encyclopaedism’, in Macé and Van Deun (2011) and ‘Knowledge in authority and authorised history: the imperial intellectual programme of Leo VI and Constantine VII’, in P. Armstrong (2013) (ed.) *Authority in Byzantium*, Aldershot.

¹ See Markopoulos (2008).

² Lemerle (1986) (originally published in French in 1971). All references here are to the 1986 English translation.

and is almost entirely devoted to describing Constantine VII's literary activity and patronage in encyclopaedic terms. He sees Constantine's treatises on political institutions and foreign policy – the so-called *De cerimoniis*,³ the *De thematibus*⁴ and the *De administrando imperio*⁵ – as forming a sort of 'imperial or political encyclopedia'.⁶ While denying that Constantine's *Excerpta historica*⁷ – originally a vast collection of passages excerpted from ancient and Byzantine historians and grouped under fifty-three thematic headings – is worthy of being considered a historical encyclopaedia, because of its complete lack of critical sense, Lemerle has no problem in seeing it as a moral encyclopaedia.⁸ He goes on to state that 'besides these encyclopedias that Constantine VII considered his own work, there were many others, but it is difficult to be precise about their origins and dates'.⁹ Of these works associated with Constantine but not by him, Lemerle confidently identifies the *Geoponica*, with its preface addressed to Constantine, as an encyclopaedia of excerpts from ancient treatises on farming.¹⁰ On the basis of the same preface, which makes a threefold division of the state into the military, the religious and the agricultural sectors, Lemerle regards the military treatises written under Constantine VII as constituting a military encyclopaedia.¹¹ He contemplates the possibility that the liturgical and hagiographical compilations of the late tenth century (*Typikon* and *Synaxarion* of the Great Church, the Metaphrastic Menologion) were meant to form an analogous encyclopaedia of religion, though ultimately he rejects the idea, mainly because these projects are not attributable to Constantine's initiative.¹² For the same reason, Lemerle does not accord encyclopaedic status to the legal compilations made during Constantine's reign, although he does suggest that the law books issued by the Macedonian dynasty as a whole do add up to 'a kind of legal encyclopedia'.¹³ He also includes within his encyclopaedic purview the contemporary *Hippiatrica*, a veterinary treatise, and an anonymous treatise on animals dedicated to an emperor Constantine who can only be Constantine VII.¹⁴ He admits, however, that it is difficult to speak of a 'scientific encyclopedia', given the lack of evidence for any tenth-century treatise or compendium on the exact sciences.¹⁵

³ Ed. Reiske (1829); Book 1 ed. and trans. by Vogt (1967).

⁴ Ed. Pertusi (1952).

⁵ Ed. Moravcsik (1993).

⁶ Lemerle (1986) 317.

⁷ Ed. de Boor (1903–10). See András Németh in chapter 11.

⁸ Lemerle (1986) 331–2.

⁹ Lemerle (1986) 332.

¹⁰ Lemerle (1986) 332–5; cf. Lefort (2002) vol. I, 231–310 (translation of the preface on p. 231).

¹¹ Lemerle (1986) 336–7. On the tenth-century military treatises, see Sullivan (2010).

¹² Lemerle (1986) 337–9. On the Menologion of Symeon Metaphrastes, see now Høgel (2002).

¹³ Lemerle (1986) 340–1.

¹⁴ Lemerle (1986) 342; on the *Hippiatrica* see now McCabe (2007).

¹⁵ Lemerle (1986) 343.

Lemerle observed that further codicological research might reveal the existence of other collections of an encyclopaedic nature, but he added, cautiously, ‘we must refrain from seeing encyclopedias everywhere’.¹⁶ His wishful thought has not been realised by subsequent research, but his words of caution have proved all too appropriate, and indeed have haunted his own results. Lemerle, like Alphonse Dain before him, clearly laid himself open to the charge of seeing encyclopaedism where it did not exist, and the charge was brought quite trenchantly by Paolo Odorico in an article published in 1990.¹⁷ The objections to Lemerle’s method and thesis are not hard to find, and they go well beyond the points that Odorico raises in his critique. None of the tenth-century compilations is an encyclopaedia in the strict Byzantine sense of being a digest of the material studied in the full *enkyklios paideia*: for this, one has to wait until the work of Neilos Doxopatres in the twelfth century and that of Joseph Rakendytes in the fourteenth.¹⁸ There is one earlier work that fits the modern definition of an encyclopaedia, and which also qualifies for the looser Byzantine meaning of the *enkyklios paideia*, in that it provides a primary reference work of names, terms and meanings that a student with a basic education in grammar would find useful. Indeed, its usefulness for that timeless figure, the average student, long outlasted Byzantium, and earned it a famous mention by Alexander Pope:

For Attic phrase in Plato let them seek,
I poach in *Suidas* for unlicens’d Greek. (*Dunciad* 4. 227–8)

The *Suidas* or, more correctly, *Souda* with its thousands of entries from A to Ω, is, despite its quirks, a real encyclopaedia, and Lemerle rightly recognised that it represented the culmination of the tenth-century developments he was analysing.¹⁹ Among other things, it incorporated much material from the *Excerpta historica* of Constantine VII. Yet, as he also recognised, it cannot be securely dated: the earliest manuscripts are thirteenth-century, the earliest mention is late twelfth-century, the *terminus post quem* provided by the content is the reign of the emperor John I Tzimiskes (969–76), and the only indication that the author lived closer to that time than to the year 1100 is his intemperate outburst against the patriarch Polyeuktos (956–970). In any case, there is nothing to link him personally to Constantine VII.

This points to the main limitation of Lemerle’s survey of Byzantine encyclopaedism. While stretching the definition of encyclopaedism to cover

¹⁶ Lemerle (1986) 339. ¹⁷ Odorico (1990).

¹⁸ On Neilos Doxopatres, see de Vos (2011) and Neirynek (2011); on Joseph Rhakendytes, see Gielen in chapter 12.

¹⁹ Ed. Adler (1928–38); see also Lemerle (1986) 343–5; Baldwin (2006).

all the compiling projects authored or sponsored by Constantine VII, he ignores many others that exhibit the same concern with instructing, collecting, and retrieving the past, particularly the imperial past. Most surprisingly, he hardly mentions the *Palatine Anthology*, the vast collection of epigrams from antiquity to the ninth century that was put together in the mid-tenth century, probably by Constantine of Rhodes, who presents himself elsewhere as a devoted dependent of Constantine VII.²⁰ Lemerle totally neglects another anthology of the same date, a collection of anacreontic poems now only partially preserved in *Barberinianus* 310.²¹ This *de luxe* manuscript is in the same hand and surely from the same imperial workshop as the equally luxurious *Berolinensis Philippicus* 134, the manuscript of the *Hippiatrica*, which Lemerle did recognise as a Constantinian commission.²² But there are other tenth-century works without clear imperial connections (and without classical content) but with distinct encyclopaedist tendencies. The most obvious is the *Patria*, the collection of legends about the origins of Constantinople and its main buildings, which appears to date from 995.²³ Less obvious, perhaps, but equally deserving of consideration are certain chronicles and saints' lives that assemble antiquarian and didactic material. The tenth-century chronicle of Pseudo-Symeon, and the closely related text that was adopted verbatim by George Kedrenos, contain much miscellaneous information, especially about the origins of the arts and sciences and about the early monuments of Constantinople, which corresponds to entries in the *Souda* and the *Patria*.²⁴ Perhaps significantly, much of this information is entered with the $\delta\tau\iota$ formula that introduces each of the excerpts in the *Excerpta historica*.²⁵ Hagiography may not seem to be a natural medium for encyclopaedism, but, as we have already seen, Lemerle raises the possibility that the great rewriting (*metaphrasis*) of older Greek hagiographical texts by Symeon Metaphrastes at the end of the tenth century formed an encyclopaedic project. Two new saints' lives written around the same time, the *Life of Andrew the Fool* and the *Life of Basil the Younger*, exhibit encyclopaedic tendencies. The two texts complement each other in forming a *summa* of commonly held, but not officially taught, doctrines about the end of the world: the Last Judgement, heaven, hell, and the afterlife. Both texts can be linked to Basil the *parakoimomenos* (high official charged with the

²⁰ Cameron (1993); Lauxtermann (2003) 83–6.

²¹ Lauxtermann (2003) 123–8. ²² Lemerle (1986) 342; McCabe (2007) 24–7.

²³ Ed. Preger (1907); see also Dagron (1984); Berger (1987).

²⁴ Pseudo-Symeon is largely unpublished. For Kedrenos, see Bekker (1838–9); and for his sources, Tartaglia (2007).

²⁵ E.g. see Bekker (1838–9) vol. I, 12, 15–17, 20–3, 26–8, 321–3, 325–7, 330–3, 563–7.

protection of the emperor during the night), the illegitimate son of the emperor Romanos I, and the all-powerful minister of four later emperors for almost forty years before he was dismissed and disgraced by Basil II in 985. He is of interest to us here because he was a munificent patron of art and literature who continued Constantine VII's work of compiling and collecting, and was probably responsible for commissioning the hagiographical rewriting project of Symeon Metaphrastes.²⁶

The so-called encyclopaedism of the tenth century was thus both more varied and less imperial than Lemerle portrays it. It was also older, as Lemerle himself remarked in another flash of recognition that his categories and his chapter divisions were too restrictive: 'It would be a serious error to attribute everything to Constantine Porphyrogenitus: all he did was to follow and perhaps accelerate a movement that started before him.' As we have already seen, the legal compilations made under Constantine were only a postscript to the much more impressive projects of codification undertaken on the initiative of his father and grandfather: the *Procheiros Nomos* and *Eisagoge* of Basil I, the *Basilica* and the *Novels* of Leo VI.²⁷ The numerous military handbooks of the tenth century – Lemerle's 'military encyclopedia' – all went back to the revival of the genre by Leo VI in his *Taktika*,²⁸ a collection of military precepts based on, though not limited to, the so-called *Strategikon* of Maurice. Leo was directly or indirectly responsible for a number of other compilations and treatises. He himself composed or compiled a set of ascetic precepts, the Ὑποτύπωσις οὐακιστικῆ ψυχῶν (*Rule for the Guidance of Souls*), which he addressed to an unnamed abbot, and which can be seen as the monastic equivalent of the military *Taktika* that was aimed at the empire's generals.²⁹ He approved, if he did not actually commission, the ceremonial treatise of Philotheos the *atriklines*, which attempted to systematise the protocol for the seating at imperial banquets.³⁰ In method (researching and editing old documents), in purpose (to remove the confusion due to the passage of time), and in ideology (concern with order, *taxis*, the dignity of the empire, and conformity to an imperial and divine norm), Philotheos

²⁶ On the *Lives* and the links to Basil the *parakoimomenos*, see Magdalino (1999a). On Basil's patronage of literary projects, see most recently Pryor and Jeffreys (2006) 183–7. His patronage of the Metaphrastic project can be inferred from the evidence that Basil II commissioned the work while under the dominance of the *parakoimomenos* and ordered it to be burned after the latter's fall: see Høgel (2003) 221–3.

²⁷ On these works and the relationship between them, see now Signes Codoñer and Andrés Santos (2007).

²⁸ Ed. and trans. Dennis (2010).

²⁹ Ed. Papadopoulos-Kerameus (1909) 213–53. ³⁰ Oikonomidès (1972) 65–235.

clearly anticipates the *De ceremoniis* of Constantine VII. Another collection produced under Constantine VII, the Palatine anthology, was very largely built on the anthology put together under Leo VI by Leo Kephala, whose position as a priest in the imperial New Church next to the Great Palace suggests that he was working at least with the emperor's approval.³¹ Finally, we may include under the encyclopaedic products of Leo's reign, or its immediate aftermath, two didactic verse pieces by one of the emperor's high officials, Leo Choirosphaktes, both addressed to the infant Constantine VII. One concerns the operation of the hot springs at Pythia (modern Yalova) in Bithynia,³² while the other, the *Chiliostichos theologia* (*Thousand-line Theology*), is a curious defence of transcendental monotheism against an unnamed and probably non-existent critic.³³ I have suggested elsewhere that it was a vehicle for Choirosphaktes to defend his own contentious brand of scientific religion that advocated the worship of God through study of the natural world rather than through sacraments, saints and icons.³⁴

While this particular piece of synthesis was going nowhere, the same was not true of the other works we have just mentioned. Thus three of the encyclopaedic projects associated with Constantine VII around 950 – the military, the ceremonial and the poetic – clearly originated with Leo VI around 900. Moreover, it was Leo, not Constantine, who brought the legal project to its peak, and who produced a florilegium of ascetic wisdom that had no follow-up later in the tenth century. All in all, it is deeply misleading to speak of the encyclopaedism of the age of Constantine Porphyrogenitus. The movement was at least fifty years older than Constantine, and many of its characteristic products appeared up to a generation after his death, or perhaps even later in the case of the *Souda*, the most bona fide encyclopaedia in the group. And when the movement is viewed as a chronological whole, the appropriateness of defining it as encyclopaedism becomes even more questionable. The works of indisputably encyclopaedic content – basically the *Souda*, the *Excerpta historica*, and perhaps the *Geoponica* – are not numerically well represented, while compilations of a political and religious nature are not only more numerous but also, on the whole, come first, in that they predominate among the projects of Leo VI.

How then should all these works that we have assembled under the leaky umbrella of encyclopaedism properly be labelled and contextualised? Is it correct or helpful to assemble them at all, and should we not rather be undoing, as opposed to completing, the process of association begun by

³¹ Lauxtermann (2003) 86–9. ³² Gallavotti (1990).

³³ Ed. Vassis (2002). ³⁴ Magdalino (2006) 72–6.

Lemerle? Should we not classify each work according to genre and content, so that we reserve the label of encyclopaedia to the very few that deserve it, and find different labels for the rest? This might be useful, but it would still leave us with the many connections between different works. To begin with, such a concentration of collecting and compiling projects is not to be found in any other period of Byzantine history. Secondly, most of them can be tied to the patronage of two emperors, father and son, with pronounced cultural interests, a strong sense of dynastic identity, and a strong didactic urge. Other works have associations with a quasi-imperial cultural patron, Basil the *parakoimomenos*. Thirdly, apart from the common denominator of collection, several projects, including the ‘true’ encyclopaedias, share other characteristics: a concern with the past and ancient material, and a concern with ‘order’ (*taxis*). Finally, three of the non-imperial works – the chronicle of Kedrenos, the *Patria*, and the *Souda* – share material or an interest in the same kinds of material which suggests that genre is not in itself a decisive criterion.

So is there a better concept than encyclopaedism for describing the compilations of the ‘Macedonian Renaissance’? Paolo Odorico, Lemerle’s critic, suggested that we refer simply to a ‘cultura della *sylloge*’, a collecting culture, which is certainly not inaccurate, though it is also not specific enough to the production of the period.³⁵ Paul Speck suggested that the imperial core of this production was in essence a series of ‘teaching dossiers’ for the instruction of the heir to the throne.³⁶ Again, there is something in this suggestion, and we shall return to it, but the tone of the works in question is not merely pedagogical – unlike, for example, the manuals produced for Michael VII in the eleventh century³⁷ and for members of the Komnenian aristocracy in the twelfth. The tone in the tenth century is also normative and authoritative. Thus Peter Pieler’s idea was that the political treatises of Constantine VII – the *De thematibus*, *De cerimoniis*, and *De administrando imperio* – should be seen as extensions to the Macedonian emperors’ work of legislation and legal codification; they did for public law what the *Eisagoge*, the *Procheiros Nomos*, the *Basilika* and the *Novels* of Leo VI had done for private law.³⁸ I have endorsed this idea, and developed it to argue that the extension into the domain of public law began not with Constantine but

³⁵ Odorico (1990). ³⁶ Speck *et al.* (1991) 269–306, 326–7.

³⁷ Treatises on physics and astronomy (Symeon Seth and/or Michael Psellos), ed. Delatte (1939) vol. II, 17–126; treatise on diet (Symeon Seth), ed. Langavel (1868); treatise on the laws (Michael Attaleiates), in Zepos and Zepos (1931) vol. VII, 411–97. For the didactic poems of the eleventh and twelfth centuries, see Jeffreys (1974).

³⁸ Pieler (1989).

with Leo VI, and specifically with the ceremonial treatise of Philotheos and the military *Taktika*.³⁹ Philotheos describes his enterprise as a revision and reissue, sanctioned by the emperor, of the prescriptive protocol for seating at imperial banquets. Although he does not use the words, he is effectively describing the process of *anakatharsis* (cleansing), *ananeosis/anakainisis* (renewal), and *epanorthosis* (restoration) that the emperors applied in their recodification of the Justinianic *Corpus iuris*. In the military *Taktika*, Leo VI directly echoes the language of legislation. In his preface, he adopts from his source, the *Strategikon* of Maurice, the description of the work as an introduction (εἰσαγωγή), and adds that it has the status of a legal manual (ἔχοντα προχείρου τάξιν νόμου).⁴⁰ *Eisagoge* and *Procheiros Nomos* were the names of the first two law codes composed under the Macedonian dynasty. There are further echoes of the *Eisagoge* in the first constitution of the *Taktika*, where Leo defines strategy and tactics, and the aim (σκοπός) and purpose (τέλος) of the latter.⁴¹ The *Eisagoge* begins similarly with definitions of law, justice and the aim, purpose, and speciality (ἴδια) of the emperor and patriarch. The legal tone of the *Taktika* is made clear in other ways. The twenty sections of the book are called constitutions (διατάξεις). Leo repeatedly uses verbs of command: κελεύομεν, παρακελεύομεν, διεταξάμεθα, διωρισάμεθα. He insists that the dispositions of the treatise are binding ‘laws of strategy’ (νόμοι στρατηγικοί), and generals are urged to ensure that their behaviour (τρόπος) becomes a law (νόμος) for their troops. Finally, the method and conception of the *Taktika* were those that the emperor and his legal team had used in the recodification of Roman law. He refers several times to another book in which the ancient military texts were quoted *in extenso* (κατὰ πλάτος). The same procedure is evident in the legal projects of Basil I and Leo VI, where the *Procheiron* summarises the translated texts of the Justinianic corpus collected in the πλάτος τῶν νόμων, which developed into the sixty books of the *Basilika*.⁴² To some extent, this division followed the Justinianic model of the *Institutes* and the *Digest*, with the difference that the *Institutes* were intended to be a textbook for freshmen law students, whereas the *Procheiron*, as its name implies, was a manual for use by professionals at all levels. A closer parallel might be found in the theological literature of the sixth to ninth centuries, in the florilegia of patristic authorities that accompanied dogmatic treatises and conciliar acts. Here we may note that, like the so-called *Strategikon* of Maurice, the *Taktika* adopts a strong religious tone, and is concerned to present the science of

³⁹ Magdalino (1997). ⁴⁰ Dennis (2010) 2–11.

⁴¹ *Taktika* I, 4.6 (ed. Dennis (2010)). ⁴² See Signes Codoñer and Andrés Santos (2007).

warfare as compatible with divine providence, the ultimate cause of victory. The preface even suggests that military science is necessary to attract God's support, stating, in a remarkable inversion of the usual cause and effect, 'as long as the armed forces of the Romans were in good order (ἐν εὐταξίᾳ), the state enjoyed divine assistance for not a few years'.⁴³

This statement is key to understanding the rationale, not only of the *Taktika* and the military treatises, but also of all the imperial compilations of the 'Macedonian Renaissance', including those that cannot be considered remotely juridical, like the *Excerpta historica*. All are concerned with restoring the empire, its institutions and culture to a state of 'good order' (*eutaxia*) associated with the great Christian emperors of the past.⁴⁴ The same concern can be seen in the building projects of the Macedonian emperors,⁴⁵ and in Constantine VII's appointment of professors to teach rhetoric, philosophy and mathematics to budding civil servants.⁴⁶

The importance of the concept of *taxis* in Byzantine imperial ideology of the ninth and tenth centuries has long been recognised, as has the analogy that it implies between the realm of the earthly emperor and the order prevailing in the kingdom of heaven. It is not clear, however, whether the ideological significance of the word derived from secular or religious usage. What is certain is that the Macedonian emperors promoted *taxis* and *eutaxia* with a strong sense of religious mission. The preface to the *Excerpta historica*, written presumably by the head of the cutting and pasting team, addresses Constantine VII as the most Christian and orthodox emperor of all time. As Lemerle notes, Constantine was very active in promoting hagiography and in bringing holy relics to Constantinople from the east.⁴⁷ His father Leo VI, surnamed 'the Wise', cut an even higher religious profile, and probably came closer to being emperor and priest than any other Byzantine sovereign:⁴⁸ he wrote and preached numerous sermons,⁴⁹ he officiated at the consecration of churches, and, as we have seen, he compiled a book of ascetic precepts, which effectively told the head of a monastic community how to do his job. His conception of himself as a divinely inspired image of Christ, and a new Solomon, undoubtedly informed his codification projects, which, I have been arguing, were the inception of the so-called encyclopaedism of the tenth century.

⁴³ Dennis (2010) 4–5. ⁴⁴ Magdalino (1999b).

⁴⁵ The buildings of Basil I and Constantine VII are described in their respective biographies in *Theophanes Continuatus*: Bekker (1838) 321–41, 447, 449–52, 456, 460–1. For Leo VI, see Magdalino (1988). Some of the relevant texts are translated by Mango (1972) 202–6, 207–10.

⁴⁶ Bekker (1838) 445–6. ⁴⁷ See Flusin (2001) 48–54.

⁴⁸ On Leo in general, see Tougher (1997); on Byzantine 'caesaropapism', see Dagron (2003).

⁴⁹ Ed. Antonopoulou (2008).

Yet his projects also, undoubtedly, owed much to the inspiration of a man whose vision of a Christian society was as orthodox and ecclesiastical as Leo's was authoritarian and imperial. This was the great Photios, who in addition to being twice patriarch (858–67, 877–86), was, in the years before his second patriarchate, a major intellectual and spiritual influence on Basil I and tutor to the young Leo. Photios is widely regarded as the real author of one of the first Macedonian law codes, the *Eisagoge* of Basil I. He may well also have ghost-written the two collections of κεφάλαια παραινετικά, chapters of moral advice in the *Fürstenspiegel* tradition, that Basil addressed to Leo;⁵⁰ as didactic florilegia, these works anticipate Constantine VII's 'encyclopaedic' treatises on government, at least one of which (the *De administrando imperio*) was destined for Constantine's son and heir Romanos II. It also picks up a genre that Photios had already cultivated in his didactic letter to the newly converted king of Bulgaria, Boris-Michael, which can be seen as a mini-encyclopaedia of useful knowledge for a Christian ruler.⁵¹ Photios' encyclopaedic tendencies did not stop here. He produced a *Lexicon*,⁵² and for much of his career he was at work on a massive collection of 280 book reviews, the so-called *Bibliotheca* or *Myriobiblos*, which in size and range of authors dwarfed all the encyclopaedias of the tenth century apart from the *Excerpta historica*.⁵³ It included reviews of ancient encyclopaedic works, including the so-called *Anthologies* of John Stobaeus, about which Photios' concluding judgement is worth quoting as an example of what he thought made a good encyclopaedia:⁵⁴

The book is useful both to those who have read the works of the authors in question and to those who have no previous experience; to the former, as an *aide-mémoire*, and to the latter, because in studying them, if only in summary, they will in a short space of time gain knowledge of many and various good ideas. For both types of readers, it is easy to find what they are looking for, whenever one wishes to refer from the summaries to the full texts (ἀπὸ τῶν κεφαλαίων εἰς αὐτὰ τὰ πλάτη). Among other things, the book is far from useless for those who wish to write and practice rhetoric.⁵⁵

Whether or not Photios introduced the *Bibliotheca* to his royal pupil, the work was certainly being read while Leo VI and Constantine VII were organising their compilation and codification projects: the earliest manuscript, of the tenth century, was copied to include the marginal comments of at least one earlier reader.⁵⁶

⁵⁰ Texts in PG 107, xxi–lx; cf. Markopoulos (1998).

⁵¹ Ed. Laourdas and Westerink (1983) no. 1; translation and commentary by Stratoudaki White and Berrigan (1982).

⁵² Ed. Naber (1864–5); and Theodoridis (1982–98). ⁵³ Ed. Henry (1959–77, 1991).

⁵⁴ Codex 167 (Henry (1959–77, 1991) vol. II, 149–59).

⁵⁵ Henry (1959–77, 1991) vol. II, 159. ⁵⁶ Zorzi (2004).

As obscure as the question of the *Bibliotheca*'s influence is that of its origins. What motivated Photios to take on such a huge task, and what determined his choice of books to review? If the project began, as he states in the preface,⁵⁷ as a reading list requested by his brother Tarasios, it surely grew into more than that, and it surely continued long after Photios' departure on the embassy to Baghdad that supposedly prompted the request. It is also difficult to believe that the works reviewed were simply those that Photios happened to own, or to have come across while browsing. Given the preponderance of Christian works, and Photios' frequent expressions of disapproval on pagan or heretical content, it is reasonable to suppose that he aimed to produce an ideologically correct canon of reading material. Given, too, the fact that Photios was not the only well-read scholar in mid-ninth-century Constantinople, but had an immensely learned contemporary in the person of Leo the Mathematician or Philosopher,⁵⁸ it is reasonable to suggest that his reading list would have had an emphasis that reflected their ideological and intellectual differences. Leo was deeply into mathematics, astrology, and profane classical poetry, subjects that are poorly represented in the *Bibliotheca*. Although he had a brief ecclesiastical career as archbishop of Thessalonica, he owed it to the iconoclast regime of the emperor Theophilus, and specifically to his cousin John the Grammarian, the last and most notorious iconoclast patriarch, with whom he was deposed when the regime changed and icons were restored in 843 in what was hailed as the Triumph of Orthodoxy. Photios, by contrast, came from a pro-icon family and when patriarch was loud in his condemnation of iconoclasm as a 'bastard and Jewish doctrine'.⁵⁹ He showed his zeal for orthodoxy in other ways: in his efforts to eradicate the Paulician heresy, in his denunciation of the Latin addition of the *Filioque* to the Nicene Creed, and in his related concern to convert Bulgaria to the Byzantine form of Christianity. His collection of book reviews should therefore be seen in the same context as his collection of doctrinal and moral teachings for the newly converted Bulgarian king, his collection of introductory laws, the *Eisagoge*, to be issued by the emperor Basil I, and his collection of moral precepts for Basil's son and heir Leo VI. What all had in common with each other, and with Photios' homily on the restoration of icons to Hagia Sophia,⁶⁰ was the renewal of order in the church after the disorder of iconoclasm.

Thus the search for the origins of tenth-century Byzantine encyclopaedism takes us back, through the codifying projects of Leo VI and

⁵⁷ Treadgold (1977). ⁵⁸ Lemerle (1986) 171–204; Magdalino (2006) 62–9.

⁵⁹ Mango (1977). ⁶⁰ Trans. Mango (1958), no. XVII.

the edifying works of Photios, to the tradition of excerpting, collecting and compiling authoritative texts that had been fundamental to the definition of correct doctrine from the very beginnings of Christianity, but which had flourished particularly in the intense religious debates of the fifth to ninth centuries. The period produced a large quantity of collections in various literary forms: decrees and canons of church councils, strings of proof-texts quoted in or attached to theological treatises, ‘chains’ (*catenae*) of patristic commentaries appended to the text of the bible, anthologies of saints’ lives and edifying tales, handbooks of spiritual and moral precepts. One collection, the *De fide orthodoxa* of John of Damascus, was effectively an encyclopaedia of orthodox knowledge, comprising one hundred entries on religious and moral themes.⁶¹ Basic to all of this production was the genre of the florilegium.⁶² It would be a mistake to reduce everything to florilegia, just as it would be wrong to regard John of Damascus and Photios as the sole channels for their transformation into codified proto-encyclopaedias. However, I do think it is appropriate to focus on the Triumph of Orthodoxy over iconoclasm in 843 as a defining moment and turning point.⁶³

In closing, I would like to mention three projects that had nothing to do with Photios but were undoubtedly part of the restoration of orthodox *taxis* after 843, and were not without consequence for tenth-century encyclopaedism. One was a corpus of hymns for the saints’ feasts of the whole liturgical year composed by Joseph the Hymnographer with the support of the Patriarch Ignatios, Photios’ rival; this anticipated the liturgical and hagiographical projects of the late tenth century, the *Synaxarion* and the Metaphrastic rewriting of the saints’ lives in the liturgical calendar.⁶⁴ Another was the *Sotirios*, a late ninth-century moral and religious florilegium, which served as the basis for the Slavonic *Sbornik* of the Bulgarian Tsar Symeon.⁶⁵ The third project triggered by the Triumph of Orthodoxy that deserves to be mentioned in the context of encyclopaedism is the chronicle of George the Monk,⁶⁶ which may date from as early as the 840s.⁶⁷ This is for most Byzantinists the quintessential *Mönchschronik*, with all the negative things that implies: short on reliable, original factual content, but high on righteous ranting against pagans, Jews and heretics, especially iconoclasts. Yet if there is such a thing as a typical *Mönchschronik*, or indeed a typical *Weltchronik*, the chronicle of George the Monk is not it. It is rather a history of orthodoxy, or history rewritten from an orthodox point of view. To make

⁶¹ See the first volume of the new edition, with introduction, by Kotter *et al.* (2010).

⁶² See M. Richard, ‘Florilèges grecs’, *Dictionnaire de spiritualité*, V, cols. 475–512.

⁶³ On its significance, see Flusin (2010). ⁶⁴ See N. Ševčenko (1998).

⁶⁵ Ed. Sieswerda (2004). ⁶⁶ Ed. de Boor (1904). ⁶⁷ Afinogenov (1999) and (2004).

up for its lack of *histoire événementielle*, it has long digressions on topics such as prophecy, monasticism and the Holy Land, often with large extracts quoted from patristic writings. It is a compendium of useful religious information for the orthodox believer, set in a historical narrative framework. Its potential as an encyclopaedia was recognised by the real encyclopaedists of the tenth century, since it is an important source for both the *Excerpta historica* and the *Souda*. It is thus a very real link between orthodoxy and encyclopaedism.

11 | The imperial systematisation of the past in Constantinople

Constantine VII and his *Historical Excerpts*

ANDRÁS NÉMETH

Introduction

The purpose of this study is to explore the innovative, yet in some ways also conservative, processes by which Byzantine imperial power was manifested in an extraordinary project initiated by Constantine VII Porphyrogenitos ('born in purple'), in 905. His lifetime was simultaneously marked by a glorious military expansion of Byzantium in the Near East, by his instability on the imperial throne as a ruler, and by the revival of artistic and literary culture at court. That revival drew heavily on Greco-Roman traditions. Most importantly, Constantine subsidised and controlled the writing of history, certainly his favourite field of interest, so much so that the period from 813 to his own reign was presented and is still viewed according to Constantine's interpretation. In parallel with the production of new historiography, former historical writings in Greek were collected and restructured in a very unusual way under his imperial supervision. This project aimed at splitting up a vast corpus of earlier historical writings into small sections and rearranging them in a new systematic order. This intricate editorial procedure was carried out during Constantine VII's sole reign (945–59) and completed later, in the early years of Basil II (976–1025). It resulted in an enormous collection of historical extracts known as the *Constantinian Excerpts* (henceforth *CE*).

To modern observers, the entire project may well seem bizarre both in its scope and in its peculiar approach to previous historiography. The project covered the works of at least twenty-six historiographers ranging in date from the fifth century BC to the ninth century AD (for a chronological list, see [Table 1](#)). As part of the project, the selected historical works were disjointed into tiny sections. Each section was then in turn assigned to one of fifty-three carefully chosen topics – topics which reflected the priorities and interests of a close-knit imperial circle.¹ The selection of the fifty-three

¹ On intellectuals, scholars, and the imperial circle under Constantine VII, see Markopoulos (1989).

Table 1. *Historiographers in CE*

Name	period	works	V	G	ER	EB	A
Herodotus	(BC 485–25)	<i>Histories</i>	7			(9)	
Thucydides	(BC 454–399)	<i>His life by Marcellinus, History of Pelop. War</i>	8			(10)	
Xenophon	(BC 428–354)	<i>Cyr., An.</i>	9	A1			
Polybius	(BC 200–118)	<i>Roman History</i> (220–168 BC)	—	12	B5	5	(1) (7)
Diodorus of Sicily	(BC 90–30)	<i>Bibliotheca Historica</i>	—	5	E1	9	(7) (5)
Dionysius of Hal.	(1st c BC–AD)	<i>Ant. Rom.</i>	—	11		4	(6)
Nicolaus of Damascus	(1st c BC–AD)	<i>Autobiography, Histories, Life of Augustus</i>	*	6			1
Josephus Flavius	(AD 37–100)	<i>AJ, BJ, Ap., De Macchabeis, Vit.</i>	1		8	(2)	
Arrianus	(AD 85/90–131)	<i>Anab. Alexandri, Diadochi, Parthica</i>	10	B3	(10b)	(15)	
Iamblichus	(AD 2nd c)	<i>Babylonian History</i>	*		C2		
Appianus	(AD 115/7–61)	<i>Hann., Hisp., Ill., Mac., Mith., Pun., Sam., Syr.</i>	—	13	G1		(16)
Cassius Dio	(AD ? –223/4)	<i>Roman History</i>	—	14	F1	10	(8)
Dexippus	(AD 210–75)	<i>Diadochi, Skythika, World Chronicle</i> (–270)	*		C1		(4)
Eunapios of Sardis	(AD 346–414)	<i>Histories</i> (270–414)	*		B4		(19)
Sokrates	(AD 379–440)	<i>Church History</i> (305–439)					(5)
Priskos of Panion	(AD 5th c)	<i>Histories</i>	*		12		
Zosimos	(AD 5th c)	<i>Pagan History</i> (until 410)			7	(3)	
Prokopios	(AD 500–65)	<i>Pers., Vand., Goth. Wars</i>			B2	11	(14)
Peter the Patrician	(AD 500–65)	<i>Roman History</i> (44 BC–AD 361)	*		D1	1	(6)
Malalas	(AD 490–570)	<i>World Chronicle</i>	—	3		(18)	3
Malchos of Phil.	(AD 5th–6th c)	<i>Byzantiaka</i>	*		13	(17)	
Agathias of Myrina	(AD 532–80)	<i>Histories</i> (552–9)			A2	(11)	
Menander Protector	(AD 6th c)	<i>Histories</i> (558–82)	*		A3	14	(12)
Theophylaktos Simoc.	(AD 580s–641)	<i>Histories</i> (582–602)			B1	15	(13)
John of Antioch	(AD 6th–7th c)	<i>World Chronicle</i>	*	4	3		2
George the Monk	(AD 9th c)	<i>World chronicle</i>	2		2		4

(cont.)

Table 1. (cont.)

V	‘On virtue and vice’
G	‘On gnostic statements’
ER	‘On the embassies of Romans to the barbarians’
EB	‘On the embassies of barbarians to the Romans’
A	‘On ambushes’

The numbers underneath the abbreviations of each extant collection show the place of each historian within each collection. In V and ER, the number shows the tenth-century arrangement of the authors. In a, the sequence of groups (A–G) cannot be reconstructed but the arrangement within them (1–5) is ascertained by the careful study of ms Vat. gr. 73. In EB and A, the tenth-century sequence cannot be remodelled with precision. In column four, * shows the texts that have been almost entirely preserved only in *CE* or dependent compilations (*Souda*); — indicates that the proportion exclusively preserved in *CE* is significant.

categories led to a structure that was very different from traditional solutions like chronological arrangement, or the focus on particular events or people or states. To accomplish this idiosyncratic plan in a relatively short time, Constantine VII had to employ a considerable number of learned men and make a huge financial commitment. The enormous cost can be illustrated by the (probably not overestimated) figure of more than 10,000 sheep that had to be slaughtered and skinned to provide enough parchment to last through the various steps of the project.² In addition, a special and well-defined data-management system was invented to assist the educated men who collected, annotated, rearranged, copied and illuminated the excerpts, in a collaboration that had much in common with modern ideas of teamwork.

The fragmentary remains of this ambitious project are highly esteemed even now, especially among students of the Hellenistic, late Roman, and early Byzantine periods. Any scholar who now scrutinises the history of the Mediterranean and the Near East in the period that Constantine’s collections cover cannot avoid using them, simply because a high proportion of the disjointed historical material they contain (i.e. those sections marked with asterisks in Table 1) has not come down to us in any parallel transmission. Countless studies have tried to reconstruct the fragmented works of these

² The single extant luxury copy, the first volume of the collection ‘On virtue and vice’ contained 46 quires or more, each made of at least one sheepskin. This collection consisted of two volumes (c. 90 sheep). There were 53 collections (which would make a total of c. 4,800 sheep, assuming that all collections were of the same length as ‘On virtue and vice’). As I will demonstrate later, there must have been at least one draft copy of each collection, constituting the archetype of each final luxury copy (which makes a total of c. 9,600 sheep). Some collections might have been shorter than this but the intricate process of producing the excerpts, occasionally requiring multiple copies of the same complete historical text to be used simultaneously by the excerptors, may justify this huge number.

historiographers, striving to reverse Constantine's procedures. Despite the fact that it was intended to construct something more valuable, the Byzantine excerptors' activity has been widely viewed as destructive of the material it excerpts,³ and the *CE* has been repeatedly treated as a 'gold-mine' by scholars anxious to reconstruct otherwise lost and fragmentary works.⁴ The editors of *CE*, by contrast, approached the historical excerpts in a surprisingly pioneering way.⁵ These scholars aimed at reconstructing Constantine's collections in general rather than each historian separately, as editors before and after them preferred to do. As a consequence, the basic studies that these scholars wrote on *CE* have remained unsurpassed by later attempts.⁶

CE has been presented as an 'encyclopaedic' work since the 1950s and the 1960s and provided a starting point for viewing other compilatory works from ninth- and tenth-century Byzantium in similar terms.⁷ This volume argues that the concept of 'encyclopaedism' can be helpful in seeing the affinities between very different works of large-scale compilation. However, as Paul Magdalino and Erika Gielen rightly observe in chapters 10 and 12, labelling the highly varied body of Byzantine compilatory literature with the more restrictive genre-term 'encyclopaedia', which did not exist in Byzantium with the meaning we ascribe to it, has not always proved helpful for studying and understanding these texts individually. For *CE*, this term has been accepted by most scholars because of the emphatic claim to completeness the text makes, both in its selection of historical writings to be excerpted and in the fifty-three subjects chosen as a basis for restructuring this vast corpus of historiographers; also because of the didactic purpose of the project and its systematic methodology. Debate has centred primarily on the question of what kind of encyclopaedia *CE* was. However, that debate has not always proved fruitful. For example, the

³ By contrast, the compiler of Books 1–4 of Theophanes Continuatus, a historical account on the period from 813 to 867, compiled at Constantine VII's order, says in his prooemium 'Thou hast restored to life and caused the rebirth of those events that disappeared from memory in the course of time and had been relegated to the realm of non-being', trans. by I. Ševčenko (1998) 85.

⁴ Lemerle's opinion (in Lemerle (1986) 332) demonstrates the ambivalent approach to this project even in Byzantine studies: 'the ambitious and somewhat vague intentions stated in the preface to a work which lacks originality, would lead to great disappointment, were there not the consolation of possessing so many precious texts which would otherwise have been lost'.

⁵ de Boor (1903) and (1905), Büttner-Wobst (1906b), Boissvain (1906), and Roos (1910).

⁶ E.g. de Boor (1884), (1885), (1886), (1899), (1902), (1903), (1905), (1912) and (1914–9); Büttner-Wobst (1893), (1906a) and (1906b).

⁷ See Dain (1953); Lemerle (1966), (1971) 267–300, and its English translation (1986) 309–46. Lemerle's concept of 'encyclopaedism' was disseminated through handbooks like Hunger (1978) vol. 1, 244 and 360–7; Hannick (1986); Karpozilos (2002) 281–96; Kazhdan (1991a) and (2006) 311–36. For criticism of the concept of 'encyclopaedism', see Odorico (1990) 1–12.

restrictive labels *anti-historique* or ‘moral’, applied critically by Lemerle with reference to the term *historische Encyclopädie* used by Büttner-Wobst, do not seem to describe *CE* adequately.⁸ For one thing, as far as the selected material is concerned, the project covered only historical writings. Admittedly, the logical and temporal interdependence between events as constructed by the historiographers was broken. This breach, caused by restructuring historical passages on a thematic basis, at first sight seems to justify Lemerle’s criticism. However, the preservation of the original narrative sequence within each set of excerpts went some way towards maintaining the logical and temporal coherence of each section in *CE* (see the example in Table 2). That new coherence was implicitly a manifestation of imperial authority, as we shall see in the section following, in looking at the claims the emperor makes in the prooemium about his own project of reordering the writings of the past. As far as the second label is concerned – ‘moral encyclopaedia’ – that too seems inadequate, given that the majority of the fifty-three subjects belong to fields without any conspicuous moralising character.

Instead of debating the question of what kind of ‘encyclopaedia’ *CE* represents, therefore, it seems more rewarding to analyse *CE* as evidence for the close relationship between power and knowledge in Byzantium, which resulted in a unique way of systematising historical writings. My survey draws on the many studies which have begun to take a more sympathetic approach to compiled works, especially during the last decade, but also goes beyond them by offering a new, more thorough analysis of the tenth-century material remains of Constantine’s project, and by shedding new light on its methodology.⁹

The innovative methodology of the *Constantinian Excerpts*

The prooemium that once preceded each volume of *CE* provides significant evidence for the methodology prescribed for the excerptors.¹⁰ Because

⁸ Büttner-Wobst (1906a); Lemerle (1971) 287–8.

⁹ On the manuscript transmission, see Irigoin (1959) 177–81 and (1977); Schreiner (1987). Flusin (2002) gives a general overview of *CE*. Some authors excerpted in *CE* have been the subjects of special studies in this context, for example Polybius by Moore (1965) 126–67; Cassius Dio by Mazzucchi (1979) 131–4 and Molin (2004); John of Antioch by Roberto (2001), (2005) xxxi–xlv and Mariev (2008); Zosimos by Forcina (1987) 99–102 and Ochoa (1990); Eunapios by Smirnova (2005); Diodorus Siculus by Goukowsky (2006) x–xxix; Dionysius of Halicarnassus and Nicolaus of Damascus by Parmentier-Morin (2002); and John Malalas by Flusin (2004).

¹⁰ This prooemium has survived through two independent channels. The version preceding the collection ‘On virtue and vice’ was available in the tenth-century *Codex Peirescianus* (see below) when Henri de Valois first published it in Paris (1634). He used the same prooemium as

Table 2. *Coherent gaps in Prokopios excerpts from Persian Wars, Book 2*

Location of omission	Material omitted
EB 9 [2.2.1–15] The Gothic king's envoys to Chosroes	[2.2.11] Wisdom on using the emerging opportunity
ER 5 [2.3.54–5.27] Justinian sends Anastasios to Chosroes (breach of peace treaty)	[2.4.1–3] Appearance of the comet called 'swordfish' [2.4.4–11] The scourge of the Huns upon all Europe [2.4.13] Vitingis, the Ostrogothic king is sent to Byzantium [2.4.17–25] Justinian's letter to Chosroes [2.5.2–26, 2.5.28–33] Marching of the Persian army near the river Euphrates, the description of Circesium, Zenobia, siege of Sura
Gap between ER 5–6	[2.6.1–8] The Roman commander Bouzes' speech to the Hieropolitans
ER 6 [2.6.9–2.7.36] Negotiations between Megas and Chosroes	[2.6.10–16, 2.7.18] Germanus' plans to secure Antioch against a Persian attack
Gap between ER 6–7	[2.7.37] Deserters of Beroea join the Persian Army
Gap between ER 7–8	[2.8.1–3] Chosroes moves his troops against Antioch [2.8.8–29, 34–5, 9.14–10.9] Siege and sack of Antioch [2.8.30–3, 9.1–13, 10.10–15] Negotiations between Romans and Chosroes, Romans' speeches
Gap between ER 8–9	[2.12.8–30] Among others, Abgar story and his correspondence with Christ
Gap between ER 9–10	[2.13.8–13] Attempt to siege Edessa, siege of Constantina
Gap between ER 11–12	[2.20.12–15] The siege of Sergiupolis by Chosroes
Gap between ER 14–15	[2.26.32–7] Peace negotiations
Gap between ER 15–16	[2.26.23–34, 26.44–27.46] Persian tactics against Edessa: constructing an artificial hill, Roman response
Gap between ER 16 – EB 11	[2.28.1–2] Deaths of two Roman generals, Iustus and Peranius [2.28.21–30] Considerations on Persian colonisation strategy, characteristics of various nations in Cappadocia

Column 1 lists the passages, within **ER–EB**, where particular sections of Prokopios' *Wars* Book 2 are omitted. Column 2 gives details of what exactly is omitted. The table makes it clear that all of the excluded passages were linked with some other Constantinian subject (e. g. leading of the army, natural phenomena, sieges, battle exhortation, etc.).

previous attempts have left some points for interpreting its content unclear, the two paragraphs that explain the motives for the project and describe its method are translated in full here:¹¹

found in the collection 'On embassies of the Romans to the barbarians' from Hoeschel's edition (Augsburg, 1603) to complete the deficiencies of the *Codex Peirescianus*, which has lost its first leaves since then.

¹¹ I acknowledge Mark Drew's assistance in the English translation of this prooemium as it precedes the collection 'On the embassies of the Romans to the Barbarians' (de Boor (1903)

Since, however, with the passage of so many years, the number of events has become innumerable and the writings have become more complex, for those reasons the intricacy of the historical record has been infinitely magnified to the point of becoming unmanageable. Thus, people's inclinations and their choices have with time leaned ever more towards the worse, and they have become indifferent to the good and have neglected to learn the lessons of the past or indeed to establish the truth. As a consequence of this lack of clarity, the investigation of history is rendered obscure, both by the lack of useful books and because of people's fearing and dreading their overstretched complexity.

So it is that Constantine, born in the purple, that most orthodox and most Christian of the emperors up to the present time, fitted to the task by a most sharp discernment concerning what is good and possessing an enterprising intellect, judged that the best thing, the most conducive to the common good and useful for governing conduct is – in the first place – to collect by means of diligent research all manner of books from all over the known world; books bursting with every kind and every variety of knowledge. Next, he thought that it was necessary to divide and distribute (καταμερίσαι) their great quantity and extent, which weigh heavily on the understanding and which seem to many to be irksome and burdensome, into small sections. Hence, all the useful material which they contain in such fertile abundance could, [he thought,] be made available unstintingly to common use. By a very careful selection (ἐκλογή) the utility of these works could be demonstrated more assiduously to those who are being reared in the knowledge of letters, while at the same time their literary form (τὴν τῶν λόγων εὐφράδειαν) might be more easily impressed upon them. In addition to this, [his intention was] to distribute (καταμερίσαι) [the material] after an ingenious and careful manner into diverse subjects (ὑποθέσεις), fifty-three in number, in and through which the whole epic course of history might be grouped together. Nothing contained in the texts would escape this distribution into subjects; by this division according to the content (τῇ διαιρέσει τῶν ἐννοιῶν) nothing of the continuous narration (τῆς τοῦ λόγου ἀκολουθίας) is omitted, but rather it is preserved entire, while so vast a [procedure], not a summary (σύνοψις) but, to speak more properly, an assignment (οἰκείωσις), is applied to each subject.

As far as the purpose is concerned, as we also hear in a dedicatory poem in iambic metre addressing Constantine VII,¹² the growing number and variety of historical accounts in the first half of the tenth century made the initiator, probably Constantine VII himself, realise that the richness of these

1–2). See previous translations in Lemerle (1971) 281–2 (and its English translation: Lemerle (1986) 325–6); interpretations in Büttner-Wobst (1906a) 88–9; Wilson (1983) 143–5; and – the most precise – in Flusin (2002) 538–9.

¹² See the edition in Büttner-Wobst (1906b) 3.

texts, as sources of instructive historical examples, was hampered by the difficulty of retrieving useful information from them. The intricate narrative structures and the extensive length of these historical writings made the task of ‘information retrieval’ rather difficult.¹³ Thus, the initiator’s purpose was to extract lessons of various kinds from the intricate web of the historical writings and make them accessible for the interested reader. At the same time, the literary values of these historiographies gained a higher appraisal. By opposing the term *σύνοψις* (summarising) with *οἰκείωσις* (assigning a passage to an appropriate subject), the prooemium to *CE* makes it clear that the mastermind of Constantine VII’s project was aware of the distinction between the two compilatory alternatives, and rejected summary as a solution. The method labelled by the term *οἰκείωσις* involved rearranging the extracts following thematic principles in a way which preserved the precise formulation of the original passages.

The Constantinian method of excerpting seems to have been the following: the entire work of each historiographer was split up into short sections according to their content. This process involved the task of assigning each section to one of Constantine VII’s fifty-three subjects, probably with the help of marginal annotations. The continuous chain of the sections allocated to each subject was finally copied in separate manuscripts, each theme in a separate manuscript, and in blocks of excerpts from each historiographer in turn. In combining the various excerpts that belonged to each subject, the excerptors did not summarise the omitted passages.

Table 2 shows how Book 2 of Prokopios’ *Persian Wars* was adapted by the excerptors in practice. Both collections ‘On the embassies’ – ‘On the embassies of Romans to the barbarians’ (ER) and ‘On the embassies of barbarians to the Romans’ (EB) – contain a considerable number of excerpts from this book, although many passages of the original are also omitted. If we look closely at the content of the omitted passages, we can see that it is likely that many or all of them were included in other imperial collections. In this book, Prokopios narrated the six-year period of the war between the Persian king Chosroes I (531–78/9) and the Byzantine emperor Justinian I (527–65), i.e. the period between 540, when the Persian king broke the treaty of the ‘Eternal Peace’ (agreed in 531), and 545, when the next truce between Byzantium and Persia was concluded. The version offered by the excerptors is actually a more focused account than the original. Prokopios constantly struggles to maintain the coherence of his narrative while

¹³ See the concepts of ‘information overload’ and ‘information retrieval’ as applied to premodern scholarly works by Blair (2010) 1–8.

simultaneously following the annalistic tradition of historiography, which means giving an account of events year by year in line with the practice of Thucydides, his main model as historian. As a result of this attempt, he occasionally reiterated certain events in cases where they took longer than one year. For example, chapters 4 and 5 alike start with a new year (539 and 540) and contain numerous digressions from the events discussing Anastasios' embassy to Chosroes who decided to keep the Byzantine envoy at his court for quite a long time. There is a short phrase at the end of 5.27 saying that Chosroes finally let the envoy Anastasios leave. In this case the excerptors extracted Anastasios' embassy and created a relatively short account from Prokopios' two extensive chapters with minor modifications. As the example demonstrates, the imperial excerptors tried to purify the text of any digressions and any data that seemed to belong somewhere else. At the same time, any desire to rephrase the texts to be excerpted seems to have been restricted. This methodology was rather unusual compared to earlier compilation techniques.

Assembling verbatim citations under thematic headings was a traditional means of compiling data in a user-friendly way. Unlike *CE*, however, the subjects in other compilations tended to follow already well-established principles functioning as mnemonic and practical aids. Organisational frameworks of this type included the liturgical calendar (for example, in collections of readings from the gospels), passages from the holy scripture (for example, in collected extracts from various biblical commentaries assembled and copied next to biblical passages in *catenae*), established philosophical problems (for example, in the compilations of Stobaeus) or theological problems (for example, in dogmatic florilegia), biographical frameworks (for example, in collections of anecdotes – *chreiai* and *gnomai* – arranged by the names of individuals), chronological frameworks (for example, in chronicle text) or alphabetic order (for example, in the *Souda*). Unlike *CE*, these projects did not aim to engage with source texts in their entirety and did not invent a new set of thematic headings in order to embrace seemingly all-important phenomena in the universe. Complete coverage of extensive historical works was usually confined to projects whose primary aim was summary – which deprived the abridged texts of their original wording and original rhetorical framing – rather than compilations like *CE*.¹⁴ To my knowledge, Constantine VII's project was doing something very innovative

¹⁴ On the preference for abridged historical writings in the subsequent generations, see the *epitome* of Polybius in Urb. gr. 102 of the early eleventh century in Moore (1965) 19–20, 55–73. Cassius Dio's works were abbreviated and paraphrased by Zonaras, and Books 36–80 also by Xiphilinos in the eleventh century: Mazzucchi (1979) 134–5 and Molin (2004) 209–10.

in combining the goal of comprehensiveness with didactic aims, linked to the fifty-three subject headings. Juxtaposing historical examples of similar sorts helped to reveal patterns among past events, and anticipate the future for similar cases. Constantine VII recommends that method of learning to his son, referring to the words of Thucydides 1.22.¹⁵

But what of events which have taken place at various times between the Romans and different nations? For it is worthwhile, my dearest son, that a record of these things also should not escape you, in order that, should the same things come about on similar occasions, you may by foreknowledge find a ready remedy.

The production of the *Constantinian Excerpts*

Constantine VII's project required a rich library. Parallel to amassing diverse objects of art in his palace, the emperor had the further ambition of collecting books of every kind and extracting their essence by summarising and reorganising the rich variety of their content. The emperor housed these books, originating purportedly from all over the known world, but in practice mainly from monasteries in Constantinople and far beyond,¹⁶ in the library that he established at the imperial palace in the context of his cultural initiatives.¹⁷ This seems to have been the final destination of the 'databases' of various sorts that were restructured under his supervision. Unlike his father Emperor Leo VI (886–912), Constantine VII chose historiography as his main concern and attempted to revive events that had disappeared from memory. He seems to have been reacting against two periods of ignorance in particular: the reign of Emperor Romanos Lekapenos (920–44) and his sons, and the period of the iconoclastic emperors.¹⁸ The earlier literature

¹⁵ *De administrando imperio* 46.166–9, ed. Moravcsik (1993) 223; trans. R. J. H. Jenkins.

¹⁶ For example, Constantine VII collected the manuscript of Leo Katakylas' military treatise, which was compiled under Leo VI but not available in the imperial palace, from Sigriane monastery on the southern shore of the Propontis: see Haldon (1990) 94. On its library, see Mango and Ševčenko (1973), 265–6. There is no direct evidence for the transfer of historiographical manuscripts from the Near East to Constantinople, but it seems likely given the widespread exchange of theological and liturgical texts in this period between the two locations.

¹⁷ Constantine VII's curiosity concerning artefacts is described in Theophanes Continuatus vi. 15, 22–8, in Bekker (1838) 450,12–452,19; 477,1–4. Constantine VII established a library in the Kamilas palace (Bekker (1838) 144–5). He re-established the palace school and appointed scholars to the chairs of philosophy, rhetoric, geometry, and astronomy as described in Bekker (1838) 445–6.

¹⁸ Theophanes Continuatus, prooemium, ed. I. Ševčenko (1998) 81–7. Leo VI's reign seems to have served as a model for this exercise of preservation, despite the fact that it did not share Constantine's historiographical emphasis, as suggested by this prooemium, and by the fact that

which was preserved and collected in Constantine's imperial compilations was presented in a restructured and authoritative framework.

The material remains of *CE* – five volumes damaged to varying degrees – constitute only a very small proportion of the whole. The collection 'On virtue and vice', once numbered as the fiftieth in the series of fifty-three headings and originally consisting of at least two volumes, survives in a parchment codex that was produced in the 970s or 980s.¹⁹ This manuscript is called *Codex Peirescianus* after N. C. F. de Peiresc (1580–1637) who purchased it from Cypriot monks in 1627. The collection 'On gnostic statements' has been transmitted in palimpsest leaves, which means that the tenth-century text was erased and the parchment later reused for other texts in the fourteenth century.²⁰ The illuminated title pages, which did not lend themselves to easy recycling, were thrown away, rendering the reconstruction of the Constantinian volume extremely difficult. The erased palimpsest leaves are very similar to those in the *Codex Peirescianus* in size, in the script, and in the method of presenting the historical extracts.²¹

The fragmented remains of three other collections have survived in codices that were copied in western Europe in the sixteenth century and later. The two collections 'On embassies', classified by the criterion of whether they were sent 'by the Romans to the barbarians' or 'by the barbarians to the Romans', have been transmitted through two separate channels.²² Both of these channels go back to a massive codex, burnt in 1671 in the

texts from Leo VI's circle were reused in Constantine VII's circle: see Howard-Johnston (2001) 221–7; Haldon (1990); and Paul Magdalino in chapter 10. The revival of pre-iconoclastic historiography is manifested by the proportionally over-represented historians from fifth to seventh centuries in *CE*.

¹⁹ On MS Tours, Municipal Library, 980 C, see Büttner-Wobst (1893) and his edition (1906b) viii–xlii; Sotiroudis (1989) 165–71. My suggestion that we should date the *Codex Peirescianus* to the 970s or 980s is supported by analogies to the decorated headpieces and the script of the single manuscript: for the heart palmettes of the headpieces in the *Codex Peirescianus*, the closest parallel is the *Menologium* of Basil II, dated to c. 985 (Vat. gr. 1613, p. 406, 409, 410); the hand resembles that of Ephraim and manuscripts produced in the second half of the tenth century (on the characteristics of scribe Ephraim's hand, see Lake and Lake (1943) 263–8; Diller (1947) 184–8; Mazzucchi (1978) 276–81; (1994) 165–76; Prato (1982) 99–115; and Perria (1977–9) and (1983)).

²⁰ Vat. gr. 73: Mercati and de' Cavalieri (1923) 67–78.

²¹ *Codex Peirescianus* was copied in a space of 270×185 mm in 32 lines per page and 46–54 letters per line. The underlying text of Vat. gr. 73 was copied in a space of 260×200 mm, 32 lines per page, 45–54 letters per line: Irigoien (1959) 178–9.

²² de Boor (1903) and later scholars following him argue for four separate collections. I follow the idea of Flusin (2002) 537, 554, of separating the collections called 'embassies of the Romans to the barbarians' and 'embassies of the barbarians to the Romans'.

Escorial Library (Θ.i.4), probably one of the copies prepared for Constantine's library, which had arrived in the Escorial from Sicily in the mid-sixteenth century.²³ This codex contained both collections but in reverse order: the embassies 'sent by the barbarians to the Romans' preceded those 'sent by the Romans to the barbarians'; C. de Boor changed this sequence in his 1903 edition. The collection 'On ambushes' was transmitted fragmentarily in two sixteenth-century codices.²⁴ Most of the frequent mistakes collected by C. de Boor from the Escorial manuscript can be explained by the characteristics of the tenth-century hand of the *Codex Peirescianus*.²⁵ This suggests that the exemplar of the presently extant collection 'On ambushes' was a damaged volume from Constantine VII's library.

It seems reasonable to distinguish the draft copies of *CE* produced with the methodology described in the prooemium, from the final copies produced partially after Constantine's death. The analogous circumstances behind Constantine's other compilations which seem to rely on *CE* may shed light on the formerly unspecified dating and financing of *CE*. A small group of tenth-century manuscripts, linked with Constantine VII, share a number of codicological characteristics with the *Codex Peirescianus* and the Vatican palimpsest, which have been explained by their origination in the 'imperial scriptorium' and attribution to Constantine VII's library.²⁶ In addition, there are methodological and ideological relationships between *CE* and the material included in these manuscripts (see below). There may be another kind of link lying behind the similarities. It is striking that these works seem to have been copied in the decades subsequent to Constantine's death but not during his lifetime.²⁷ It may well be the case that all of these different texts were put together on the initiative of a single person, namely eunuch Basil Lekapenos the *parakoimomenos* (high official charged with the protection of the emperor during the night, 910/20 – after 986), an illegitimate son of Emperor Romanos I (920–44) and half-brother to Helen, Constantine VII's wife, who might have stood behind *CE* as well.²⁸

²³ Graux (1880) 93–7; de Boor (1902) 146–50.

²⁴ Escorial, Ω.i.11, ff. 74r–196v and Par. gr. 1666, ff. 97r–146r.

²⁵ See these mistakes collected by de Boor (1905) xviii–xx. This observation is based on my analysis of the script of the *Codex Peirescianus*.

²⁶ Irigoin (1959) 177–81.

²⁷ As a single exception, an encyclopaedic collection on horse medicine, the single MS of the redaction B of *Hippiatrica* (Berlin, Phillips 1538) seems to have been copied for Constantine VII during his lifetime: McCabe (2007) 269–75.

²⁸ Basil Lekapenos gained his high positions under emperors Constantine VII and Nikephoros II Phokas. He was involved in the assassination of emperor John Tzimiskes. At the peak of his

To be more precise: the single extant manuscript of the *De cerimoniis*, copied probably under the reign of Emperor Nikephoros II Phokas (963–9), successor to Constantine VII's son, Romanos II (959–63), contains several works attributed to Constantine VII and some excerpts from earlier works. The redaction in the Leipzig manuscript seems to have been linked with Basil Lekapenos.²⁹ The archetype on which the single Byzantine copy of Constantine VII's *De administrando imperio* (Par. gr. 2009) relies seems to have been a late tenth-century redaction that was copied a few decades later than the date of the original (c. 948–52).³⁰ As Basil Lekapenos is attested as the tutor of prince Romanos to whom the *De administrando imperio* is addressed he might have stood behind the original compilation and its later redaction as well.³¹ There are also two collections of military texts, both containing historical excerpts, also addressed to the emperor or his close circle. The famous Florentine collection of military strategists was prepared for Constantine VII but the manuscript itself seems to have been copied after his death and is coeval with the manuscripts of *CE*.³² This Florentine manuscript begins with a short military treatise by Constantine VII addressing his son, Prince Romanos, identical with the one at the beginning of the Leipzig manuscript of *De cerimoniis*. The other military collection was copied in the 960s for Basil Lekapenos himself.³³

The career of Basil Lekapenos may well explain the gap between the drafts and the luxury copies of *CE*. The prooemium, which seems to have been attached separately to all fifty-three volumes of *CE*, the dedicatory poem to

career, he was a regent for emperor Basil II between 976 and 986, when he immediately lost his power and was banished. On Basil Lekapenos, see Brokkaar (1972) and Boura (1989).

²⁹ The codex (Leipzig University Library, Rep. i. 17) is a collection of heterogeneous content and does not seem to have been compiled by the emperor himself as implied by its prooemium. There are works from the reign of Leo VI and the sixth century excerpted here: on ff. 154v–155r, Peter the Patrician (sixth century) whose other works were also excerpted in *CE*; on ff. 260v–262r, Pseudo-Epiphanius of Cyprus (sixth century); and on ff. 234r–260v, Philotheos' *Kletorologion* (ninth century). On the dating to 963–9 and the link with Basil Lekapenos, see Kresten (2000) 475, n. 6; its recent description by Featherstone (2002); and the palimpsest copy of the same text by Featherstone, Grusková and Kresten (2005).

³⁰ Moravcsik (1993) 32. This copy, made for a member of the imperial family (Caesar John Dukas) in 1059–81, was annotated by the monk Neophytos Prodromenos of the Monastery of Saint John the Baptist in Pera in Constantinople in 1361–2: Mondrain (2002) 492–7.

³¹ According to an inscription, although emended to some extent, Basil may have had the office of μέγας βεβούλος, which means that he was the tutor of Constantine VII's son: Brokkaar (1972) 212–13.

³² Florence, Biblioteca Laurenziana, Plut. 55.4. See its description in Bandini (1764–70) 218–38 and the literature by Haldon (1990) 38–9.

³³ Milan, Biblioteca Ambrosiana, B 119 supp. See its description in Martini and Bassi (1906) 157–60 and in-depth palaeographical and historical analysis in Mazzucchi (1978).

Constantine VII, and the comprehensive ideology behind it, demonstrate that Constantine VII wanted to have a series of final copies and suggest that the process of copying started under his reign. The complex methodology also required preparatory works preceding the final luxury copies, which may have started before Constantine VII's death but certainly continued after it. However, as Wilson noted, the production of even a single set of the fifty-three collections, consisting of a higher number of volumes, would have cost so much money that it would have required financial support over a long period.³⁴ Basil Lekapenos had the position and, thus, the financial resources to bring Constantine VII's project to completion, especially in the first ten years of Basil II's reign (976–86) when he governed the Byzantine empire as a regent. This period coincided with the interval when the *Souda* is likely to have been composed and its compilers used a number of volumes of *CE* for biographical and lexicographical entries.³⁵ As the compilers of the *Souda* did not use the complete texts of historiographers, which would have been more reasonable, it seems plausible that the manuscripts with the complete historical texts were not regarded as valuable and thus were not available in the imperial library any longer. The banishment of Basil Lekapenos, the confiscation of his properties in 986 and *damnatio memoriae* in 996 may also explain the lack of evidence for later use of *CE* in Byzantium.

In summary: *CE* seems to have been composed by a procedure which took many decades under close supervision. The single luxury copies of the work were housed in the palace library and were not circulated beyond it. The system of the marginal indices assisted biographical and lexical enquiries, and by that means *CE* seems to have provided the *Souda* with a great deal of historical material. However, the unusual method of articulating the historical data, which served the interests of a small circle at the court, was not widely appealing and resulted thereafter in the loss without trace of the greater part of *CE*.

Number fifty-three

The selection of the fifty-three subjects, an innovation of *CE*, seems to have been carefully planned. The *De administrando imperio* also contains fifty-three chapters. In addition, Polyaeus' *Hypotheseis* (military activities of historical figures alphabetically grouped by their names) was rearranged

³⁴ Wilson (1983) 145.

³⁵ On the relationship between the *Souda* and *CE*, see de Boor (1912) and (1914–19). On dating the *Souda* to Basil II's reign, see Kazhdan (1991b) 1930–1.

according to fifty-three military problems. This redaction survives only in a codex copied to Basil Lekapenos.³⁶ Except for these three cases, to the best of my knowledge, the number fifty-three has not been used as a basis for other compilations in Byzantium or elsewhere. The prooemium to each collection says that subject number 1 – the most important collection – contained excerpts ‘On inauguration of the emperors’. In the same prooemium, each collection was labelled with a number from one to fifty-three: number twenty-seven received the title ‘On embassies of the Romans to the barbarians’ and number fifty was entitled ‘On virtue and vice’. It is also stated in the prooemium that the fifty-three subjects were selected to encompass the entire historical record of the past.

The choice of this number can be explained according to mathematical–scientific and historical–ideological criteria. In Christian numerology, 153 was an important number. The disciples of Christ miraculously caught this number of fishes (John 21:1–14). When discussing the mathematical significance of this number, Evagrius of Pontus explained 153 as composite of 100 and 53. Fifty-three is the sum of a triangular number (the sum total of continuous series of numerals, in this case from one to seven which is equal to twenty-eight – i.e. $1 + 2 + 3 + 4 + 5 + 6 + 7 = 28$), ‘indicating the spiritual knowledge of the Trinity’, and a spherical or circular number (one which, when multiplied by itself, reproduces itself again as the last digit, i.e. $5 \times 5 = 25$), ‘which express the cyclical movement of time.’³⁷ The latter is perhaps linked with *CE*’s strategy of focusing on the patterns which lie behind recurrent historical phenomena instead of presenting events one after another in linear fashion.³⁸ Fifty-three is also regarded as a special number in mathematics for several reasons. It is a special prime, divisible only by one and itself, and also the sum of five consecutive primes ($5 + 7 + 11 + 13 + 17$). The uniqueness of the prime numbers (*protoi arithmoi*) had been recognised since the birth of Greek mathematics. In addition, another possible explanation – more historical–ideological – can be consciously suggested. This number might have been considered a symbol of the triumph in the course of the Roman empire, as is explicitly stated in Polybius’ introduction (1.1). It took fifty-three years for Rome to expand its power from a city-state to the whole inhabited world

³⁶ Ambros. B 119 sup., ff. 162r–185v, ed. Foucault (1949) 9–66.

³⁷ Evagrius of Pontus, ‘On Prayer: One Hundred and Fifty-Three texts’ (CPG 2452); introduction in PG 79, 1165–1168. On the triangular and spherical numbers, see the handbook by Nicomachus of Gerasa, ii. 8 and ii. 17. 7, in English translation in D’Ooge (1926) 240–2, 257.

³⁸ For other examples of suppressing time, in the Jewish view of time in the Roman period, see de Lange (1978) 256.

(220–168 BC). This ideological interpretation is supported by other evidence that Polybius' views were cited in Constantine VII's circle and by the fact that these sentences also feature in the collection 'Gnomic statements' in *CE*.³⁹

Imperial sponsorship and the selection of subjects

It is increasingly common to think of tenth-century activities of producing large-scale compilations as a form of cultural sponsorship which displayed political power.⁴⁰ The favoured way of composing historical works under Constantine VII was in the form of imperial biographies.⁴¹ The preface to the most famous of these works, the only secular biography thought to have been produced in Byzantium by Constantine VII himself (the *Vita Basilii*), mentions that the author's original plan was to write the history of the Roman empire from Constantine the Great, focusing on individual political and military leaders and their memorable deeds.⁴² The fifty-three themes of *CE* were probably intended as aids for this huge plan. The period covered by these new biographical accounts had not been dealt with in any comprehensive historical work before Constantine VII (the first group, covering 813–867, was written by the continuator of Theophanes' chronicle, an unknown scholar working under the supervision of Constantine VII; the life of Basil I (867–86) by the emperor himself; and a third group of biographies (886–961) by two other authors). The thematically organised excerpts of *CE* must have provided these new biographical accounts with a great deal of material. In the manuscripts of *CE*, the names of the historical figures appear in the margin, one name next to almost every excerpt. These indices must have facilitated any attempt to collect biographical data. It also appears from the works ascribed to Constantine VII that he had an interest in biographical anecdotes and that his scholars occasionally used material from *CE* for new compositions.⁴³ For example, the story of 'The

³⁹ E.g., Theophanes Continuatus, ed. Bekker (1838) 21, 19–21 = Polybius 1.1.2–4 on the significance of fifty-three = Boissevain (1906) 104; *De administrando imperio* 1. 10–13 and *Vita Basilii* 56 = Polybius 38.4.1 = Boissevain (1906) 214, 10–2.

⁴⁰ See chapter 10 by Magdalino; also Harries in chapter 8 on earlier centuries. On imperial encyclopaedism in China, see Zurndorfer, chapter 24.

⁴¹ See Alexander (1940) and Jenkins (1954).

⁴² Constantine Porphyrogenitus, *Vita Basilii*, 1, ed. Bekker (1838) 211–2. See the English translation of this passage by Alexander (1940) 195.

⁴³ On the anecdotes embedded in the didactic treatise *De administrando imperio*, see Howard-Johnston (2001) 309, n. 24–5; 312, n. 32; 315, n. 36–8 and 328.

wheel of fortune' and Sardanapalus is extracted in two versions in the collection 'On embassies', retold by Byzantine envoys in Persia; each version was used in slightly different ways to enhance the narrative within which it was included.⁴⁴ The sentence from *Vita Basilii* 56, introducing one of the direct uses of this story from *CE*, says:⁴⁵

Since historical writing rejoices in enriching the narration with diverging stories and impressing the readers' emotions through style, it is worth reporting what evolved between the Frankish king and Soldanus, the African one . . .

This interest in reusing the material of *CE* in new contexts explains the careful attention paid to preserving the phrasing of the original texts and assembling such passages as public speeches, letters, epigrams and literary portraits (*ekphraseis*) in different volumes of *CE*. The practical usefulness of this kind of material can be illustrated by two examples. John Mystikos, a Byzantine envoy sent by Constantine VII in 946 to the Abbasid court, amazed Arab historian al-Masūdi with 'his wide knowledge of the history of the kings of ancient Greece and Rome and of their contemporary philosophers and their philosophical systems and theories'.⁴⁶ The other example is the collection of historical excerpts on military subjects, which were copied in the same manuscripts together with manuals on siege techniques.⁴⁷ It is a historical fact that Byzantine armies proved successful in the battlefield in the Near East, in Crete and in the Balkan peninsula in Constantine VII's lifetime and in subsequent decades. It is unknown, however, to what extent this success relied on the theoretical knowledge of the past which had been accumulated with attentive care in the palace.

On the basis of cross-references inserted in the margins of the five extant collections explaining in which other collections missing passages are to be looked up, scholars have restored the number of known titles of the

⁴⁴ Ševčenko (1992) 191, n. 60. (1) Theophylaktos Simokattes (6.11.10–15) ed. de Boor (1887) 242–3 was excerpted in the collection 'On embassies sent by the Romans' exc. 5, ed. de Boor (1903) 224,23–225,17. This version was used in *Vita Basilii* 56, ed. Bekker (1838) 294. (2) Menander, fr. 6,1 has only been transmitted in the collection 'On embassies sent by the Romans', ed. de Boor (1903) 177,12–34 and was used in *De administrando imperio* 29.123–9, ed. by Moravcsik (1993) 129.

⁴⁵ Bekker (1838) 294, 3–6.

⁴⁶ Shepard (2006) 35. The source is al-Masūdi, an Arab historian and geographer from the first half of the tenth century.

⁴⁷ Such manuscripts from the second half of the tenth and early eleventh century are Par. suppl. gr. 607, Par. gr. 2442, Escorial Y.iii.11, Vat. gr. 1164. On historical excerpts on siege, see Van den Berg (1947). On Constantine VII's opinion on the practical use of both in campaigns, see Haldon (1990) 107.

imperial subjects to twenty-six out of the fifty-three,⁴⁸ in other words half of the whole compilation.⁴⁹ The decoration of the manuscripts demonstrates that the fifty-three imperial headings were regarded as more important than the names of the historiographers and the titles of the excerpted works. The Constantinian titles were copied in epigraphic majuscule in gold surmounted by a headpiece that was illuminated with gold and blue. The names of the historiographers and the titles of the excerpted works were always copied in a secondary position in the margin.⁵⁰ Each excerpt began with ὅτι, meaning ‘that’, implying that it was a text authorised by the emperor, which is the usual opening form of the paragraphs in other works attributed to Constantine VII. The omicron of ὅτι is similarly illuminated with gold.

There is also a surprising degree of similarity, not adequately discussed in earlier scholarship, between the ideological framework on which the fifty-three headings are based and the organising principles behind the other works attributed to Constantine VII. In order to show how closely the classification system of *CE* depended on the emperor and his close circle, I want to offer now a more detailed account of the subjects of *CE*, comparing them to the priorities we see in other works composed in Constantine VII’s circle.⁵¹

For one thing, *CE* was united by an unusual emphasis on various aspects of secular power. Several factors might explain that emphasis. The fact that Constantine VII was born from Leo VI’s fourth marriage – forbidden by canon law – resulted in countless troubles in his career and weakened his position behind Emperor Romanos I Lekapenos (920–44) and his sons (until 944).⁵² The difficulties in maintaining the power of the dynasty established by his grandfather, Basil I, in 867 may have played a major role in stirring his interest in imperial careers, a category which enjoyed a prestigious position in the excerpts (five known titles). The prooemium

⁴⁸ Büttner-Wobst (1906a) 108–19.

⁴⁹ On the basis of the marginalia of Vat. gr. 977 on Theophylaktos Simokattes, Schreiner (1987) 21–3 suggested other titles such as ‘on the deaths of the emperors’, ‘on magistrates’, ‘on punishments’, ‘on festivals’, ‘on reasons of wars’, ‘on sieges’, ‘on dangerous events’ and ‘on natural phenomena’.

⁵⁰ The only exception is the first author, Josephus Flavius on f. 2r (MS Tours C980): Ἐκ τῆς ἀρχαιολογίας Ἰωσήπου περὶ ἀρετῆς καὶ κακίας. This text is surrounded by a more lavishly illuminated headpiece than the others.

⁵¹ See their list in other arrangements in Lemerle (1971) 283–4; Schreiner (1987) 14–21; and Flusin (2002) 553–5.

⁵² On the complex problem of Leo VI’s fourth marriage, see Oikonomidès (1976a) 161–70 and (1976b). Dagron (2003) 215–19 describes Constantine VII’s attempt to normalise church and state relations in *De ceremoniis*.

to *CE* clearly says that the first collection of the whole system assembled extracts ‘On inauguration of the emperors’. Similarly, the enthronements of emperors Leo I (457–74), Anastasios (491–518), Justin (518–27), Leo II (473–4), Justinian (527–65), Nikephoros II Phokas (963–9), and Romanos II (959–63) are embedded, in that order, in the *De cerimoniis*, attributed to Constantine VII.⁵³ Imperial succession was also important in the description of the imperial sarcophagi in the Church of the Holy Apostles (*De cerimoniis* 2.42–3);⁵⁴ as a counterpart, ‘On the succession of sovereigns’, which included other types of rulers than Roman emperors, also appears among the lost titles.⁵⁵ Imperial marriages received attention in *De cerimoniis* (1.41) and in *De administrando imperio* (13.147–9), in which the chronicler George the Monk, also included in *CE*, was cited; the subject ‘On marriages’ in *CE* was probably inspired by the same curiosity. The collections ‘On Caesars’, and ‘On ambushes (against emperors)’ also reflect an interest in the emperor’s personality.

In addition to his assertive epithet ‘most orthodox and most Christian of the emperors’ in the prooemium, Constantine VII’s ‘orthodoxy’ is also made clear in the collection ‘On miraculous events’.⁵⁶ A related interest in relics might have inspired some writings – probably commissioned rather than written by Constantine VII – on the translation of the relics of John Chrysostom, Gregory of Nazianzus, and the holy image of Edessa to Constantinople (944).⁵⁷ This interest can also be seen behind the collection ‘On ecclesiastical affairs’. The surviving reference to this collection title refers to a passage from George the Monk on the dual nature of Christ, a significant problem in theological discussions because of the Monophysite

⁵³ Reiske’s hypothesis (given in his 1751 preface, iii) that the chapters ‘On inauguration of the emperors’ in Constantine VII’s work (*De cerimoniis* 1.91–6, ed. Reiske (1829) 410–33 in Leipzig University Library, Rep. i.17, ff. 154v–72r) come from the lost collection of *CE* was convincingly refuted by Wäschke (1878). The coronation of Romanos II appears in the table of contents of Book 2 (as ch. 17 on f. 174r) and was copied on f. 203, which has been lost since the sixteenth century. The similarity of taste behind these selections, however, cannot be denied.

⁵⁴ *De cerimoniis*, 2.42 contained the succession of the emperors after Constantine the Great, as is known from the table of contents. The Leipzig codex has lost 5 leaves between f. 215 and f. 216, with ch. 42 on them. This chapter was, however, preserved in the palimpsest in Istanbul, as demonstrated by Mango and Ševčenko (1962).

⁵⁵ In this context, see the reference to Phalaris (Diodorus Siculus 9.30) in the collection ‘On gnomic statements’, ed. Boissevain (1906) 289.

⁵⁶ See two miracles of baby Moses (Josephus, *AJ* 2.226–8, 234–7) in Büttner-Wobst (1906b) 40–41 and a lost passage from Polybius in Roos (1910) 172.

⁵⁷ See the homilies attributed to Constantine VII in *BHG* 728, 794, 878d, 1486: Lemerle (1971) 270–2 and (1986) 313–5; Ševčenko (1992) 184–6; Flusin (1999) and (2001) 48–51. An account of the translation of the holy image of Edessa (*mandylion*) to Constantinople by Constantine VII, attributed to the emperor, was included in the extensive collection of *Saints’ Lives* by Symeon Metaphrastes and later disseminated the orthodox emperor’s image.

heresy.⁵⁸ From among church historians, only Socrates is known to have appeared in the collection of ‘Gnomic statements’ in *CE*. There is no other information on the content of this collection; nevertheless, we cannot rule out the possibility that church historians other than Socrates were also excerpted under this heading.⁵⁹ The phenomenon that theological and hagiographical subjects seem under-represented in *CE* may be explained by Constantine VII’s hagiographic project of collecting lives of saints in the framework of the Byzantine liturgical calendar; the synaxarion of the Constantinopolitan church seems to have been composed with the assistance of Emperor Constantine VII’s circle.⁶⁰ In addition, the largest collection of saints’ lives, known as the *Menologion* – completed a generation later under Symeon Metaphrastes’ supervision (before 912 – after 982) – might have been part of Constantine VII’s programme of encyclopaedic projects.⁶¹ Finally, dogmatic florilegia were available at the court and their approach to systematising patristic writings seems to have influenced the use of thematic distinctions in *CE*.

The inclusion of material on geography–ethnography (three titles), war, stratagems, diplomacy (nine titles) and politics (two titles) presumably appealed to the interest of the political figures in Constantinople who constituted Constantine VII’s inner circle. These various interests are manifested not only in the titles of *CE*, but also in Constantine’s other miscellaneous works and in the manuscript production of his age. The subjects entitled ‘On customs’⁶² and ‘On nations’⁶³ as well as ‘On settlements’⁶⁴ may also be associated with the emperor’s favourite geographic and ethnographic interests. Similar curiosity inspired several chapters not only in *De administrando imperio* and in *De thematibus*, where Stephanus Byzantinus’ geographical encyclopaedia of previous sources was a basic source, but also

⁵⁸ Büttner-Wobst (1906b) 145. See this passage in de Boor (1904) 473,21–475,4. On this collection, see de Boor (1886); Büttner-Wobst (1906a) 111.

⁵⁹ Flusin (2002) 540.

⁶⁰ Luzzi (1989) 183, n. 156 mentions the Arabic translation of the letter dedicating the synaxarion to ‘Constantine born to the purple silk’. Ševčenko (1992) 188–9, n. 52 expands the argument with a similar allusion to Constantine VII by naming Tithonos both in the Greek dedicatory letter of the Constantinopolitan *Synaxarion* (H= Codex Hierosolymitanus Sanctae Crucis 40 contains a text compiled in 950–6, ed. Delehaye (1902) xiv), and in the iambics preceding the collection ‘On virtue and vice’, ed. Büttner-Wobst (1906b) 3. In the same letter, the compiler, Deacon Euaristos, mentions his method: ‘I retained the simple statements, removing and cutting off what seemed not to be central to the story’, trans. Høgel (2002) 55. See also Flusin (2001) 41–7.

⁶¹ On the basis of lost sources, Psellos describes the imperial initiative and the method used for this compilation in his *Enkomion on Symeon Metaphrastes*: ed. Fisher (1994) 185, lines 333–41, commented on by Høgel (2002) 92–126. Basil Lekapenos might also have stood behind the *Menologian* project: see Høgel (2002) 70.

⁶² de Boor (1903) 26. ⁶³ Büttner-Wobst (1906b) 84. ⁶⁴ Büttner-Wobst (1906b) 36.

in a codex comprising a military collection that was copied for Constantine VII's library.⁶⁵ All of these works contain excerpts from earlier historical writings on military and geographical subjects.⁶⁶ The author of *De thematibus* (1.2. 1–12) provides evidence for the existence of a thematically arranged collection of historical excerpts already in the 940s. He concludes that the name *Armeniakon* was first used in the time of Emperor Heraklios because he cannot find it in Prokopios, Agathias, and Menander, a chronological sequence which is followed for these historiographers in *CE*, nor does it appear in a number of geographical texts.⁶⁷ A geographical collection of historical excerpts, supplied with marginal indices of the sort present in the manuscripts of *CE*, would have made it easy for the compilers of the *De thematibus* to browse through a large amount of text in order to look for a tiny detail of this kind.

The frequent references to the lost collection 'On the command of the army'⁶⁸ show that *CE* shared the military interests that lay behind other chapters in Constantine's works.⁶⁹ The collections 'On victory',⁷⁰ 'On defeat'⁷¹ or 'On transformation of defeat into victory',⁷² 'On battles'⁷³ or 'On conflicts'⁷⁴ classified the excerpts according to significant events in war. The collection entitled 'On public speeches'⁷⁵ has some overlaps in subject matter with a section of a manuscript that was probably copied for Basil Lekapenos in the 950–60s.⁷⁶ A few passages from a collection 'On sieges

⁶⁵ MS Laurentianus Plut. 55,4 (see above) contains a few leaves (ff. 403 and 405) with a text which may be connected with this title: Στρατηγικὸν περὶ ἐθνῶν διαφορῶν ἐθνῶν ('The art of war concerning the customs of various nations'), attributed to Constantine VII. Dain finds this text a paraphrase of the *Strategicon* of Maurice (9.2–3). See also the last folios of the same manuscript (ff. 401, 402, 404). See Dain and Foucault (1967) 362.

⁶⁶ E.g., Nicolaus of Damascus, *FGHist* 90 frs. 71 and 23 = *De thematibus* 1.3.7–31 and 2.6.7–13, ed. Pertusi (1952) 67–8 and 90. These extracts seem to be more extensive than the other citations of Nicolaus transmitted in Stephanus Byzantinus.

⁶⁷ *De thematibus* 1.2.1–12, ed. Pertusi (1952) 63.

⁶⁸ E.g., de Boor (1903) 14, 379; Büttner-Wobst (1906b) 335; Roos (1910) 116, 123; de Boor (1905) 33, 222; Boissevain (1906) 131.

⁶⁹ The single extant codex of *De cerimoniis* from the tenth century contains a few chapters on military affairs: see the account of two unsuccessful military expeditions against the Saracens on Crete in 910–1 and 949 (*De cerimoniis* 2. 44–5, ed. Haldon (2000)); also the three treatises on imperial military expeditions by Constantine VII in two manuscripts, assigned to the imperial scriptorium by Irigoin (1959) 177–81, Leipzig University Library, Rep. i.17, ff. 1r–21r and Florence, *Biblioteca Laurenziana*, Plut. 55,4, ff. 1r–2r, ed. Haldon (1990).

⁷⁰ de Boor (1903) 390. ⁷¹ Boissevain (1906) 210.

⁷² Büttner-Wobst (1906b) 9. ⁷³ de Boor (1905) 207. ⁷⁴ Büttner-Wobst (1906b) 99.

⁷⁵ de Boor (1903) 484; Büttner-Wobst (1906b) 63; Roos (1910) 153; de Boor (1905) 4, 30, 48, 215, 222; Boissevain (1906) 412.

⁷⁶ Milan, Biblioteca Ambrosiana, B. 119 Sup. ff. 141–61. On the manuscript copied by a similar hand to the *Codex Peirescianus*, see Mazzucchi (1978). The hypothesis by Vári (1908) 76 that the Ambrosian manuscript contains fragments from this collection was refuted by Ahrweiler (1967) 393–4 and Mazzucchi (1978) 290–2.

of various towns' (although this title is not preserved among the cross-references), seem to have been reused in another manuscript copied under Constantine VII's reign.⁷⁷

The two collections 'On embassies sent' (no. 27) 'by the Romans to the barbarians' and 'by the barbarians to the Romans' also seem to have been inspired by an interest in war and diplomacy. These collections, which as we have already seen largely survive, seem significant from an ideological point of view. The hypothesis that the excerptors initially compiled a single collection is supported by the fact that the extracts from Herodotus, Thucydides, Agathias, and Appianus were copied under the heading 'On embassies' without further distinction. Their inclusion among the other historians in the collection of embassies sent 'by the barbarians to the Romans' seems a later step in the editorial procedure.⁷⁸ After collecting enough material to contrast the Romans – which also meant Byzantines in our terminology – with barbarians, the excerptors separated the extracts as far as they were able. When choosing between Romans and barbarians, the excerptors classified the embassies sent to Alexander the Great as if 'to the Romans'.⁷⁹ This recognition of the Macedonian king as Roman reveals the ideological slant of *CE* and can be explained by viewing him as a positive paradigm for later emperors, which is how he often appears in the *Vita Basilii*.⁸⁰ The collection 'On governance of the state' presumably also contained excerpts of political relevance.

The collection 'On hunting' refers to a popular activity of the elite.⁸¹ The content of the collection 'On inventors and their inventions' is unclear and may have contained extracts on creative minds and their inventive ideas.⁸² The collection 'On courageous deeds'⁸³ reflects the universal interest in extraordinary events. The distinctions in the one 'On virtue and vice'

⁷⁷ A mid-tenth-century manuscript (Par. suppl. gr. 607, f. 16–17, 88–103) contains historical excerpts on sieges of various towns. These fragments were assigned to one of *CE* by Dübner (1863) 479–80; see also Dain and Foucault (1967) 337–8, 347–9; and the refutation of this hypothesis by Irigoin (1977).

⁷⁸ See these passages edited by de Boor (1903) 435–41, 513–68.

⁷⁹ Flusin (2002) 553, n. 56. *A Life of Alexander the Great* was included in *De ceremoniis* (2.56) but has been lost. Another piece of evidence for the existence of Alexander's life in the Constantinopolitan court is that the archpriest, Leo of Naples, prepared a Latin translation between 951 and 969, probably from the same Greek life that he brought from Constantinople during his embassy to the court of Constantine VII and Romanos II (Featherstone (2004) 115 and Pfister (1906) 204–5). According to Jenkins (1954) 17, the continuator of Theophanes, a historian under Constantine VII's supervision, relied extensively on Plutarch's biographical principles as laid out in his *Life of Alexander*. In addition, Arrian's *Anabasis of Alexander* was also included in *CE*.

⁸⁰ See Trahulia (1997) 21–5.

⁸¹ See the reference to this collection in de Boor (1903) 275. On hunting in Byzantium, see Patlagean (1992).

⁸² See the reference to this collection in Boissevain (1906) 222.

⁸³ Büttner-Wobst (1906b) 338, 354; de Boor (1905) 33.

(no. 50) seem to derive from moral categories which are identical to those we find in dogmatic florilegia.

We also know of several other collections which were popular in Constantine VII's reign and which extracted examples from various literary genres embedded in historical texts: for example 'epigrams',⁸⁴ *'ekphraseis'* (literary portraits of buildings, works of art, people, activities, times or seasons),⁸⁵ 'letters of the sovereigns',⁸⁶ and 'gnomic statements' with or without their historical contexts.⁸⁷ As for the epigrams, the single codex transmitting the largest thematically classified collection of epigrams in Greek, the *Palatine Anthology*, seems to have been copied – and probably also finalised – under the sole reign of Constantine VII.⁸⁸ Alan Cameron observed that an epigram extracted from Diodorus Siculus in the Constantinian collection 'On gnomic statements' does not follow the text as transmitted in Diodorus but the variant of the *Palatine Anthology*.⁸⁹ For this reason, he suspected a closer relationship between *CE* and the final redaction of the *Palatine Anthology* than was previously thought. A cluster of oracles excerpted in the *Palatine Anthology* (14.76, 78–99) from Herodotus with Constantine's methodology may also show interdependence between the two projects.⁹⁰ At the same time, *ekphraseis* about the marvels of Constantinople were also popular in Constantine's circles, as demonstrated by the description of the Church of the Holy Apostles by Constantine of Rhodes, dedicated to Constantine VII.⁹¹ In addition, letters – both fictitious and authentic – of famous historical persons, especially rulers, enjoyed popularity in the tenth century

⁸⁴ Büttner-Wobst (1906b) 207.

⁸⁵ The lost collection (ἐν τῷ περὶ ἐκφράσεως) referred to in the volume 'On virtue and vice' (Büttner-Wobst (1906b) 123,23–4) on the description of the high priest's vestments by George the Monk (26,11–30,23) is also mentioned in the context of Polybius' (8.4.2) description of war-machines in *Souda* Σ 74, s.v. σάμβυκες. See Büttner-Wobst (1906a) 111.

⁸⁶ de Boor (1903) 451.

⁸⁷ Büttner-Wobst (1906b) 212: Diodorus Siculus, exc. 28 (7.12.1); Büttner-Wobst (1906b) 254: end of Diodorus Siculus, fr. 188 (21.12.3–5), 'On gnomic statements' exc. 1.

⁸⁸ The *Palatine Anthology* is preserved in a single manuscript, now split into two volumes: Palatinus gr. 23 (now in Heidelberg) and Par. suppl. gr. 384. See its facsimile edition by Preisendanz (1911). The dating of this manuscript ranges from the 930s to 1050–70. Aubreton (1968) and (1969) dated it to 1050–70; Cameron (1993) 116 gave the period of Constantine VII's sole reign (945–59). Agati (1984) 43–59 suggested a date at the end of the tenth century on palaeographical grounds. Beckby (1957–8) 70 gave a date around 980. Wilson (1983) 138 suggested 930–50.

⁸⁹ See *Anth. Pal.* 7.325 and the reference in the collection 'On virtue and vice' (Büttner-Wobst (1906b) 207,29) to the collection 'On the epigrams' and the text transmitted in the collection 'On gnomic statements' (Boissovain (1906) 272,1–4) in Cameron (1993) 293–7.

⁹⁰ The succession of the extracted oracles assiduously follows Herodotus' narrative and embeds a few prose sentences as well (*Anth. Pal.* 9.703, 14.80 and 95 = Holt. 4.91, 1.91, and 7.169).

⁹¹ On Constantine of Rhodes, see Legrand (1896).

and inspired the flourishing epistolary culture of the period.⁹² As far as gnomic sentences are concerned, a new collection of wisdom sayings taken exclusively from historiographical texts would have satisfied the interest in expanding traditional wisdom collections (discussed by Teresa Morgan in [chapter 5](#)). Maxims (or *chreiai*) were popular in rhetorical exercises (*progymnasmata*) and in hagiography (e.g., sayings of the desert fathers), both of which were available in the tenth century.⁹³ Greek mythology was excerpted in a separate collection.⁹⁴

Selection of historiographers

The twenty-six historiographers whose texts were excerpted in *CE* (see [Table 1](#)) show that Constantine's selection from the broader stock of his library was conscious and generally followed the usual preferences represented in earlier Byzantine world histories.⁹⁵ Within each collection, however, I do not see any editorial intention behind the arrangement of the historiographers.⁹⁶ The majority of them narrate Roman imperial history – including what we call Byzantine history – the history of the east, and the historical background of the bible. However, the inclusion of the *Roman Antiquities* by Dionysius of Halicarnassus and the works of Polybius and Cassius Dio also shows a flexible attitude to royal and republican periods of Roman history. In addition, the insertion of Diodorus Siculus may indicate a more inclusive approach to 'post-mythological' Greek history than that of previous Byzantine world histories. Herodotus, Thucydides, and

⁹² See Darrouzès (1960); Dain and Foucault (1967) 339; and Musso (1976). For a typical tenth-century example from excerpted letters of famous historical figures see Ambrosianus B 4 sup. in Martini and Bassi (1906) 1, 92–4 and Lourdas (1951) 370–2. For the pseudonymous collections, see Malherbe (1977) 6–34; Müseler and Sicherl (1994) 75–91; and Hinz (2001) 129–41.

⁹³ See classical collections of *chreiai* and their Byzantine use in Hock and O'Neil (1986) and Teresa Morgan in [chapter 5](#). For the *Apophthegmata Patrum* classified both systematically (21 groups) and alphabetically according to the fathers, see Guy (1962) 119, and PG 65.

⁹⁴ Büttner-Wobst (1906b) 353, following Nicolaus of Damascus, exc. 31: ζήτηι τὰ λείποντα περὶ ἑλληνικῆς ἱστορίας.

⁹⁵ See the lack of interest in the history of the Greek city-state and Roman republic in Malalas' and John of Antioch's attitude to the past, discussed by Jeffreys (1979) 215–28 and 230. On *CE*, see Ševčenko (1992) 180.

⁹⁶ The various efforts to discover the rationale behind the inconsistent sequence of the historians by Büttner-Wobst (1906a) 90–105, Lemerle (1971) 285–7, (1986) 329–31, and Flusin (2002) 545–53, 559 have been unable to provide convincing results. Flusin's argument in favour of rearranging the reconstructed structure of the Vatican palimpsest and separating the excerpts of Eunapius from those of Polybius is based on a typographical error concerning the position of pp. 93–4 in the reconstruction in Boissevain (1906) xxv, contrary to Boissevain (1906) 104, 1.

Xenophon's *Anabasis* and *Cyropaedia* seem to have been selected as the most popular Greek historians for their stylistic value. As far as Roman imperial history – the main preference of the Constantinian collections – is concerned, several factors in the selection of historians illustrate that Constantine VII succeeded in collecting a good selection of imperial historiography, even broader than that of Photios a few generations earlier. First, it was the Constantinian collections and dependent texts like the *Souda* that transmitted the writings of a number of historiographers like Nicolaus of Damascus, John of Antioch, Malchos of Philadelphia, Peter the Patriarchian, Iamblichus' *Babyloniaca*, and a large number of books of Cassius Dio. Secondly, names were selected of those who had not appeared in Photios' *Bibliotheca*, such as Menander Protector, Priskos, and Agathias.

Apart from the preferences already mentioned for certain historical periods, *CE* also shows preferences for certain genres of historiographical writing. Records of events more or less contemporary with the author seem to have been preferred. In addition to their valuable content, their classicising style, usually following Thucydides as a model, probably played an important role in their selection among the historiographers to be excerpted. The attempt to preserve the literary quality of the historical writings together with their content also explains the preference for primary historical accounts over their later 'distortions' in chronographical texts. Admittedly, a small group of chronicles and world histories does seem to have been selected (e.g. John of Antioch, Malalas, and George the Monk). However many of those available in Constantine VII's circle were not included, for example, the foremost chronicles of the ninth century, compiled by Theophanes Confessor and George Syncellos.⁹⁷ Interestingly, biography, the most popular genre in Constantine's circle, was not chosen for inclusion either, even though it was extensively represented in Constantine VII's court historiography by the continuator of Theophanes and in his *Vita Basilii*.⁹⁸ The only exception was the *Life of Augustus* by Nicolaus of Damascus. The treatment of Plutarch's *Lives* demonstrates this attitude well; his text was used only to complete some missing chapters in Cassius Dio's narrative, without explicit mention of this editorial intervention.⁹⁹ The omission of Plutarch's *Lives* may be explained by their

⁹⁷ The omission of Theophanes' *Chronicle*, extensively excerpted in the *De administrando imperio* (chs. 17, 21, 22, 25), can be explained by its reader-friendly chronological structure that did not require imperial intervention.

⁹⁸ See Alexander (1940); Jenkins (1954); and Markopoulos (2006) 289.

⁹⁹ Cassius Dio's excerpts 106–11, ed. Roos (1910) 276–8, are taken from Plutarch's *Sulla* chs. 12, 13, 15, 22. The same can be observed in Cassius Dio's excerpts 24–7 in the collection 'On

favourable arrangement, which did not require restructuring because their arrangement already coincided with the literary taste of Constantine's court that favoured biography. Ideological omission can be detected only in the case of Prokopios' *Secret History*, which seems to have been known at the end of the tenth century;¹⁰⁰ and is probable also in the case of Appian's *Civil Wars*.

The age of Constantine VII also showed preferences for certain historical periods. The entries of the *Souda* which cite historical works may reflect preferences for certain periods in *CE*, on which they are dependent. The proposition that some of these preferences can be attributed to the compilers of the *Souda* rather than to the compilers of *CE* is weakened by the fact that the compilers of the lexicon do not usually seem to have made deliberate changes to what they found in their sources. As far as the period preceding Julius Caesar is concerned, in the *Souda* there is a surprising emphasis on the origins of Rome and on the Punic wars.¹⁰¹ Of the imperial period up to 565, the death of Justinian I, one third is from Julius Caesar to Diocletian, with a disproportionate emphasis on Trajan's Dacian war, probably because of the war with Bulgaria under Basil II. Two thirds of the entries refer to the period from Constantine the Great to the death of Justinian, with an emphasis on the period after Theodosius the Great (347–95). Of the twenty-six historiographers whose texts were selected for *CE*, twelve come from the period after Theodosius the Great. Five of these historians are contemporary with Justinian I. Perhaps it is not an overstatement to say that this period was the main model for Constantine VII and his team, given that it was similarly marked by encyclopaedic projects of the kind discussed by Jill Harries in [chapter 8](#).

Conclusions

I want to reiterate some of the main arguments I have been making. We have seen how Constantine's project imposed a distinctive mode of knowledge-ordering on a surprisingly large corpus of historical writings. In this context,

embassies sent by the barbarians', ed. de Boor (1903) 416–17, taken from Plutarch's *Sulla* chs. 22–4. See Boissevain (1895) 1, cvii–cx, 347 and Büttner-Wobst (1906a) 98–9.

¹⁰⁰ The omission of Prokopios' *Secret History* has two possible explanations: firstly, it might have been transmitted in the lost parts of the Constantinian collections as a basis of the *Souda*'s fragments; secondly, it may have been intentionally avoided because of its malicious approach to the imperial couple, Justinian and Theodora, as indicated in *Souda*, Π 2479, s.v. Προκόπιος.

¹⁰¹ On the relative frequency of mentions of different periods of Roman history in the *Souda*, see Zecchini (1999) 77–84.

contrary to widely held opinion, *CE* should be seen as an innovative solution to the challenge of restructuring former historical writings in an accessible framework, in order to satisfy the limited elite of Constantine VII's close circle. This new, rapid method of reshaping an enormous corpus of previous historiography required huge imperial investment and the cooperation of multiple assistants, similar to a modern encyclopaedia where a large number of authors have to follow strict editorial rules and submit their contributions to a superior authority. The cooperation of anonymous writers rendered the emperor the author of the whole historical encyclopaedia, a work that symbolised his power to shape comprehensive knowledge in line with his own taste. In addition, the similarity of the fifty-three subjects to the other Constantine compilations produced in the same period – especially *De cerimoniis*, *De administrando imperio* and *De thematibus* – not only suggests close connections among them, but also implies that similar cooperative methods might have been applied in compiling these works under the supervision of the emperor. It is also striking that the compilers tried hard to maintain the literary quality of the passages they excerpted. These textual 'jewels' were then available to be recycled in order to make other works more elegant, as was shown in the case of *Vita Basilii*. As far as content was concerned, collecting a rich corpus of instructive examples from the past seems to have been more important for the excerptors than the historical reality of the events, as the surprising inclusion of a fictitious narration, Iamblichus' *Babylonian History*, seems to imply. *CE* thus provide a unique illustration of the close relationship between empire and knowledge in Byzantium.

Joseph Rhakendytès' synopsis of Byzantine learning

ERIKA GIELEN

Introduction

During the last decades of the thirteenth and the early fourteenth century, the reign of the Byzantine emperor Andronicus II (1282–1328) was marked by serious social, political and economic upheavals. The Byzantine empire, once the proud and powerful heir of the great eastern Roman empire, was gradually losing most of its territories. Yet, the very same period was also an age of imperial patronage, characterised by a revival of ancient Greek culture.¹ One of its representatives was the Greek monk and scholar, Joseph Rhakendytès, also known as the Philosopher, and author of a monumental work entitled *Synopsis variarum disciplinarum*.² Modern scholars³ mostly refer to this work as Joseph's 'encyclopaedia', placing it within the tradition of 'Byzantine encyclopaedism', which is usually judged negatively.

This concept was introduced in 1971 by the French scholar Paul Lemerle,⁴ to characterise the Byzantine culture of the ninth and tenth centuries AD.

My thanks go to Professor Peter Van Deun, Professor Caroline Macé and Dr Ilse De Vos for reading earlier versions of this article.

¹ For good overviews, see Runciman (1970); Ševčenko (1971); Ševčenko (1984); Nicol (1993); Fryde (2000).

² This is the title used by modern scholars since Vitelli (1894) 490. In various manuscripts (both complete and incomplete), Joseph's work is preceded by two dodecasyllables (in Byzantine times a popular verse with twelve syllables): Μέλημα καὶ φρόντισμα καὶ γλυκὺς πόνος | οἰκτροῦ πιναροῦ Ἰωσήφ Ῥακενδύτου (*Florentinus Riccardianus Gr. 31 (K.II.4), folium 7^r*). At present, we have knowledge of twenty-three manuscripts, dated to the fourteenth, fifteenth or sixteenth century, which contain (parts of) Joseph's *Synopsis*, i.e. *Florentinus Med.-Laurentianus plut.* LVIII.20; *Florentinus Riccardianus Gr. 31*; *Mutinensis Gr. 101*; *Parisinus Gr. 3031*; *Vaticanus Barberinus Gr. 213*; *Vaticanus Gr. 111*; *Vaticanus Gr. 224*; *Vaticanus Gr. 267*; *Vaticanus Gr. 899*; *Venetus Marcianus IV. 24*; *Ven. Marcianus Gr. 529* (fourteenth century); *Florentinus Med.-Laurentianus plut.* LVIII, 2; *Florentinus Med.-Laurentianus plut.* LVIII, 21; *Venetus Marcianus VIII, 18*; *Vindobonensis Gr. 70* (fifteenth century); *Berolinensis Phil. Gr. 1573* (169) (fifteenth-sixteenth century); *Athos, Iviron 388* (4508); *Augustanus, Staats- und Stadtbibliothek 2^o Cod. 240*; *Berolinensis Phil. Gr. 1617* (214); *Bononiensis, Bibliotheca Universitaria 3526*; *Monacensis Gr. 78*; *Scorialensis Gr. 426* (ψ.1.6); and *Vaticanus Gr. 1361* (sixteenth century).

³ The standard works on Joseph the Philosopher are – chronologically arranged – the following: Treu (1899); Dräseke (1899); Terzaghi (1902); Criscuolo (1974); Stiennon (1974); Conticello (1995).

⁴ Lemerle (1971).

His starting point was an intriguing analysis of the reign of Constantine VII Porphyrogenitus (945–959) and its vast literary production.⁵ Yet, without giving any detailed definition of the Byzantine ‘encyclopaedia’ or describing its specific characteristics, Lemerle classified a wide range of very diverse texts as part of this one vague genre. Since then, many scholars,⁶ using Lemerle’s book as an authoritative reference work, have copied the term to refer to divergent examples of Byzantine literature, without much further investigation. It follows that, in most cases, their final conclusion has been, in line with Lemerle, rather negative. Lemerle, for example, ends his chapter on tenth-century encyclopaedism as follows: ‘Many features of this tenth-century Byzantine encyclopaedism surprise us. It ignores and thrusts aside the spirit of criticism. If it has recourse to original works, it is only to dismember them and deprive them of their soul. It is insensitive to antique beauty, or at least it leaves us with that impression. It lacks the idea that there can be progress, or simply adaptation . . . We have the impression of a closed world, where living reality does not penetrate.’⁷

Focusing on the *Synopsis* of Joseph the Philosopher, this article aims to refine this concept of Byzantine encyclopaedism. Joseph’s work is a good example of the way in which many of the so-called encyclopaedias from the Byzantine period, far from being brainless examples of ‘copying and pasting’, are in fact carefully thought-out and reflective of their social and cultural contexts.

Joseph Rhakendytès

Based on contemporary sources, it is commonly believed that Joseph Rhakendytès was born some time between 1260 and 1280 AD into a noble family on the Greek island of Ithaca.⁸ In this period, Ithaca was no longer part of the great Byzantine empire, but was under western rule, controlled by

⁵ For an analysis of the ‘encyclopaedic’ *Constantinian Excerpts* that were commissioned by Constantine VII Porphyrogenitus, see [chapter 11](#) by András Németh.

⁶ For a brief overview, see, e.g., Odorico (1990); also Paul Magdalino in chapter 10.

⁷ Lemerle (1986) 346. For the original French text, see Lemerle (1971) 300: ‘Bien des caractères de cet encyclopédisme byzantin du X^e siècle sont, pour nous, surprenants. Il ignore, il repousse l’esprit critique. S’il recourt aux œuvres originales, c’est pour les dépecer et les vider de leur âme. Il est insensible à la beauté antique, ou du moins le laisse croire. Il n’a pas l’idée qu’on puisse progresser, ou simplement s’adapter . . . On a l’impression d’un monde fermé, où la réalité vivante ne pénètre pas.’

⁸ See references in n. 3. One of our most important sources on Joseph’s life is a letter (*terminus ante quem*: 1332) of Theodorus Metochites (1270–1332) entitled *To a friend, on the death of the most wise and pious Joseph the younger* (edited by Treu (1899) 2–31).

the Orsini family of Rome.⁹ Although these Italian rulers predicted a splendid and successful career in public life for him, offering him the post of 'administrator of their whole household',¹⁰ Joseph left for Thessaloniki to enter a monastery, where he devoted himself to *ascesis* and to the cultivation of virtue, as well as to the study of ancient philosophy, such as the works of Plato, Aristotle, Plotinus and Proclus. However, the pure, monastic life, always behind the very same walls, did not please him. After a few stopovers 'in some mountainous refuges in Thessaly, on solitary islets around' and on Mount Athos,¹¹ Joseph turned his steps towards Constantinople, or, to use Joseph's own words, the ἔδαφος τῶν λόγων, 'the foundation of all knowledge'.¹²

There, Andronicus II had surrounded himself with distinguished literati, like Nicephorus Choumnus, Theodorus Metochites and Nicephorus Gregoras. The latter calls this 'circle' around the emperor 'a school of rhetoricians and philosophers that excels every Academy [of Plato], Lyceum [of Aristotle] and Attic Stoa'.¹³ Joseph seems to have been one of these philosophers. The evidence is the lively correspondence between Joseph and scholars like Choumnus, Gregoras and Michael Gabras.¹⁴ Besides, Joseph enjoyed imperial favour, since both Andronicus II and his grandson, the later Andronicus III, seem to have greatly appreciated Joseph's presence and advice.¹⁵ Because of his great erudition, virtuous character and piety, he was generally praised, so that, as Gregoras says in one of his letters to Joseph, 'if you deliberately closed your eyes and threw a stone into the crowd, you would surely hit one of your admirers'.¹⁶ At the end of his life, however, Joseph left the lively capital, thinking it 'necessary to flee the mob, the great city [i.e. Constantinople], the emperors, the palaces, the titles of father, high offices

⁹ Approx. 1204–1357 AD. See Nicol (1984) 1–2, 36 and 82; Fryde (2000) 208.

¹⁰ Theodorus Metochites, *To a friend*, ed. Treu (1899) 7, line 9: τῶν οἰκοῦ πάντων ἐπίτροπος.

¹¹ Theodorus Metochites, *To a friend*, ed. Treu (1899) 12, lines 6–10: ἐν . . . καὶ τισὶ κατὰ τὴν Θετταλίαν ὄρειναῖς ἀναχωρήσει καὶ νησιδίοις περὶ αὐτὴν ἐρημικοῖς.

¹² *Brief epitome of the most wise and erudite master Joseph Rhakendytès*, edited by Treu (1899) 34–38 (this phrase from 36, line 16). In what follows I will refer to this text as Joseph Rhak., *Epitome*.

¹³ Nicephorus Gregoras, *Historia Romana* 1, 471, 11–12: τὸ τῶν ῥητόρων καὶ φιλοσόφων γυμνάσιον τὸ πᾶσαν ὑπερβαῖνον Ἀκαδημίαν καὶ Λύκειον καὶ Στοᾶν Ἀττικὴν.

¹⁴ Some of these letters have been collected, edited and commented upon by Treu (1899) 47–63. Unfortunately none of the answers Joseph presumably wrote has survived, as far as we know.

¹⁵ In 1319/1320, for example, Joseph was asked by the young Andronicus to mediate in his dispute with the emperor (cf. Cantacuzenus, *Historiae*, 1, 7).

¹⁶ *Correspondance*, ed. Guiland (1927) 55, letter 13, lines 1–3: τοσοῦτοι γὰρ εἰσιν ὥστ' εἰ καὶ μύσας τοὺς ὀφθαλμοὺς ἐπιτιηδές, ἐπειτα λίθον κατὰ τοῦ πλήθους βαλεῖν ἐθελήσειας, τιμῶντά σε ἄνθρωπον πλήξεας ἄν.

and the invitations and company of the most prominent persons,¹⁷ and returned to Thessaloniki. There, he received the letter mentioned above from Gregoras, in which we also read the following: ‘Some time ago we learned that you – very skilfully and rightly – have read the works of Aristotle and those of the old [commentators] who clarify Aristotle’s obscurity, and that you have decided to publish some grand work that will be helpful to each of us.’¹⁸ This ‘grand work’, which is probably the only one that Joseph left for posterity,¹⁹ is his *Synopsis variarum disciplinarum*.

A synopsis of Byzantine learning

I am the source of all beautiful and wise words,
by which the mind is moistened and the brains are sprinkled
and manners take the appropriate order.
For I hold within all knowledge,
appropriately arranged.²⁰

Joseph prefaced his *Synopsis* with an introductory prose text about his life and work, followed by 140 iambic verses,²¹ in which he discussed the topic, structure and aim of his work. The verses just quoted immediately indicate the work’s ambitious project, i.e. to gather all possible knowledge and to bring all this together in a structured way, in just one book. In the next verses of this poetic ‘table of contents’, Joseph explains what he means by this all-embracing knowledge: rhetoric (vv. 16–24), logic (vv. 25–37), physics (vv. 38–53),²² anthropology, psychology and physiology

¹⁷ Theodorus Metochites, *To a friend*, ed. Treu (1899) 26, lines 24–6: φεύγειν ᾧετο χρήναι τοὺς πολλοὺς καὶ τὴν μεγάλῃπολιν ταύτην καὶ βασιλεῖς καὶ βασιλεία καὶ πατρότητας καὶ προεδρίας τε καὶ προκλήσεις καὶ ξυνουσίας τῶν ἐν ὑπεροχαῖς.

¹⁸ *Correspondance*, ed. Guiland (1927) 57, letter 13, lines 2–6: λόγος ἐκ πολλοῦ παρ’ ἡμᾶς ἀφίκετο, ὡς πάνυ τοι εὐφυῶς καὶ ὡς σοὶ γε ἐχρῆν, τὰς Ἀριστοτέλους διεξελθὼν βίβλους καὶ ὅσοι τῶν πάλαι τὴν ἐκείνου διασαφοῦσιν ἀσάφειαν, ἐβουλεύσω τι αὐτὸς γενναιότερον εἰς κοινὸν ἐνδείξασθαι ὄφελος.

¹⁹ It is possible that Joseph was also the author of several short prayers and hymns, but this tradition is not certain: see Pentogalos (1970); Stiernon (1974) 1391.

²⁰ *Iambic verses covering in a nutshell the whole content, structure and meaning of the sciences covered in this book and easily taken in by the mind*, edited by Treu (1899) 39–42 (39, verses 9–13). In what follows, I will refer to this text as Joseph Rhak., *Verses*.

²¹ I.e. his previously mentioned *Epitome and Verses*.

²² Joseph himself refers to this section as φυσικῶν τοὺς λόγους, ‘the principles of nature’ (Joseph Rhak., *Verses* 38). The term *physics* may be misleading, since the section’s content does not completely correspond with Aristotle’s famous treatise *Physica*. Instead, Joseph also covers concrete natural phenomena (like comets and snow) and zoology and botany and even discusses minerals and mining.

(vv. 54–68), mathematics, i.e. the so-called *quadrivium*: arithmetic, music, geometry and astronomy (vv. 69–74), ethics (vv. 75–98), and, to conclude, theology (vv. 99–134).²³

Probably due to this wide range of topics, which aspire to cover all human sciences, modern scholars have been tempted to call Joseph's *Synopsis* by the modern term 'encyclopaedia'.²⁴ The definition following this lemma in the *Encyclopaedia Britannica* runs indeed as follows: 'reference work that contains information on all branches of knowledge or that treats a particular branch of knowledge comprehensively'.²⁵ Yet, one might wonder whether this is not a risky example of *hineinterpretieren*. Even Lemerle, the 'father' of so-called Byzantine 'encyclopaedism', warns us that 'the word ['encyclopaedism'] did not exist then and the form it took in Byzantium cannot be compared exactly with any other example'.²⁶ Nevertheless my argument in this chapter is that the concept of encyclopaedism is a helpful one for describing Joseph's work, so long as we do not take it to imply that it fits a clearly defined 'encyclopaedia' genre of the kind we are familiar with in post-Enlightenment culture.

The modern word encyclopaedia is derived from the ancient expression *enkyklios paideia* (ἐγκύκλιος παιδεία). In ancient and Byzantine times, *enkyklios paideia* generally referred to an essential part of the education of young students. Although this term was 'loosely employed throughout the whole Byzantine period',²⁷ a general conclusion may be that, in Byzantine literature, it usually referred to preliminary learning, and even often became just an equivalent for 'grammar' (ἡ γραμματική).²⁸ Yet this is the one major

²³ The core of Joseph's *Synopsis* consisted of Aristotelian philosophy. This should not surprise, since Joseph was a great admirer of and expert on Aristotle, despite Metochites' allegation that Joseph thought Plato superior to Aristotle (Theodorus Metochites, *To a friend*, ed. Treu (1899) 11, lines 15–23; see also de Vries-van der Velden (1987) 130–1). Although Joseph was surely not ill-disposed to Platonic ideas (e.g., in his *De virtute* he discusses the neo-Platonic concept of θεωρία, 'contemplation'; see Stiernon (1974) 1391), he overtly refers to and praises Aristotle (e.g. Joseph Rhak., *Epitome* 34, lines 5–6; 37, lines 22–3 and Joseph Rhak., *Verses* 25–37), whereas he does not even mention Plato in his introduction by name.

²⁴ See, e.g., Terzaghi (1902); Criscuolo (1974); Stiernon (1974) 1389; Mergiali (1996) 86. Another reason might be the physical size of the work: e.g., 387 folia in manuscript *Venetus Marcianus* Gr. 529 and 374 folia in manuscript *Florentinus Riccardianus* Gr. 31, which both contain the whole *Synopsis*.

²⁵ See www.britannica.com/EBchecked/topic/186603/encyclopaedia (last consulted 28/5/13).

²⁶ Lemerle (1986) 309. For the original French text, see Lemerle (1971) 267: 'bien que le mot n'existe pas encore et que son contenu byzantin ne se laisse exactement ramener à aucun autre'.

²⁷ Constantinides (1982) 151.

²⁸ See, e.g., the statement of Georgius Acropolites (1217–1282) (*Annales*, 29, 2–4): τῆς ἐγκυκλίου ἀπὸ πρῶτου παιδείας, ἣν γραμματικὴν κατονομάζουσιν οἱ πολλοί ('having finished the *enkyklios paideia*, which people call grammar'). For *enkyklios paideia* in Byzantine times, see Buckler (1962) 200–20; Fuchs (1926) 41–5; Koukoules (1948) 105–37.

school-topic not discussed by Joseph, so that, at this point, it might be strange to call Joseph's *Synopsis* an encyclopaedia – as derived from *enkyklios paideia*. Joseph surely had some educational aims in his *Synopsis*.²⁹ However, his work was not meant as a handbook for beginning junior students, but instead reflected higher education, which consisted of a more serious and thorough study of rhetoric, higher mathematics (i.e. geometry, arithmetic, music and astronomy) and philosophy (both Aristotelian and Platonic) and, if necessary, theology.

During the early Palaeologan period (i.e. Joseph's time), this scene of higher learning was dominated by two different institutions: the so-called 'Imperial University', which was refounded by the Byzantine emperor Michael VIII Palaeologus (1224–1282) and focused purely on secular education, and, on the other hand, the Patriarchal School, which offered courses in both secular and theological studies. Besides these schools, (wandering) private teachers also offered courses in higher education.³⁰ This renewed interest in science and literature was the result of the preceding political events. Since 1204 AD, indeed, Constantinople had been occupied by western crusaders.³¹ Because of the almost sixty-year long occupation, many buildings had to be restored when Michael VIII reconquered his capital in 1261. Due to the long-lasting cultural decline that went with the 'barbarian' invasion, the educational system – especially higher education – also needed to be revived. A new corpus of scientific texts that could be used by students had to be established.³² Although we do not know much about any teaching activities of his,³³ it is clear that Joseph, too, aimed

²⁹ This I will discuss more in detail later in this chapter.

³⁰ See Fuchs (1926) *passim*; Bréhier (1941) 34–69; Constantinides (1982) and (2003) *passim*; Mergiali (1996) *passim*.

³¹ On the fourth crusade and its aftermath in Byzantium, see Geanakoplos (1973) esp. 119–37; Queller and Madden (1997); Talbot (1993); Fryde (2000) 82–90; Angold (2003); Erminio (2005); Laiou (2005).

³² See especially Cacouros (2006) 1–24.

³³ There is no evidence that Joseph taught at a private or public school, as did, for example, Maximus Planudes (see, e.g., Constantinides (1982) 66–89). He seems to have been rather a spiritual leader and teacher of individual, promising scholars, like Thomas Magister (who later became the monk Theodoulos – see *PLP* 16045). The only surviving letter of Thomas to Joseph, in which he speaks highly of Joseph's virtuous and beneficent character and great wisdom and in which he invites Joseph to a scholarly 'meeting' (σύλλογος) in the city of Thessaloniki, has been published in *Anecdota Graeca* (Boissonade (1829–33), vol. II, 212–28; an (insufficient) Latin translation can be found, next to the Greek text, in *PG* 145, coll. 431–46). Another of his pupils was the famous Byzantine physician Johannes Actuarius (see Hohlweg (1984)), who, in one of his letters to Joseph, asks the monk to share his huge learning and wise opinions with him (Johannes Actuarius, *De spiritu animali*, ed. Ideler (1841–2), vol. 1, 386, lines 32–8: Εἰ δέ πη καὶ τῶν τεθεωρημένων σοὶ ἀξιοῖς ἡμᾶς κοινωνοὺς γίνεσθαι διαπορθεύων καὶ ἡμᾶς τὰ κάλλιστά σοι θεάματα [‘If somehow you deemed us worthy to share

to contribute to this goal with his *Synopsis* – although in his own distinctive way.

As far as the attitude of Byzantine scholars in the Palaeologan period is concerned, Cacouros³⁴ states that it was their aim to produce surveys of the topics taught at school that were both concise and as complete as possible. Joseph's *Synopsis* fits well with this academic aim of creating abridged scientific texts, since – as stated in its twofold introduction – it consisted of a concise, but complete and manageable overview of all the sciences, ranging from rhetoric to theology.³⁵ One of the reasons behind writing his *Synopsis* seems to have been to fill a gap, so to speak, in the educational scene. In his prose introduction, Joseph himself explains that, when he was a young man, he was looking for someone who could 'guide'³⁶ him to true knowledge. Yet, although at Constantinople he found many 'spiritual and wise men' who supposedly could lead him to perfect his higher studies, he was not pleased, since the 'oversupply' of teachers and learning often led people astray from the (more important) pursuit of virtue.³⁷ Therefore, it occurred to him that he had to act himself.³⁸ So he 'studied the books of wise men who had dealt with various subjects . . . And having gone through all of this after a detailed study of the sciences, unwilling to waste my time on frivolities, I gathered one thing from here, another from there, a third from a third place and again another thing from yet another source'.³⁹

From this passage, it is clear that Joseph was well aware of the fact that several of his contemporaries and also many scholars before his own time

also your insights, by transmitting your most beautiful visions to us']. See also Nicephorus Gregoras, *Epistulae* 46, 48–58: Ἀλλ' εἰ μὲν ταῦτα λέγων εὖ λέγω, πλούτιζε τοῖς σοφοῖς σου λόγοις ἡμᾶς ['If I am right in saying this, enrich us with your wise words']).

³⁴ Cacouros (2006) 26. ³⁵ Cf. n. 20.

³⁶ Joseph Rhak., *Epitome* 36, line 14: εἴ πως καὶ τινος ὁδηγίας τύχοιμι σὺν θεῷ ('if, with God's help, I were to get some guidance').

³⁷ Joseph Rhak., *Epitome* 36, lines 17–18: πνευματικοῖς καὶ σοφοῖς ἀνδράσι συγγίνομαι. Παρὰ τούτοις μὲν οὖν ἦν τελειοποιὸν εἶδος διαφόρου παιδεύσεως ('I associated with spiritual and wise men. With them, a perfecting form of excellent education was to be found') and Joseph Rhak., *Epitome* 36, line 34 to 37, line 3: ὡς ἂν ἐκκλίνοντι καὶ τὴν ἐν πολλαῖς βίβλοις ἀσχολίαν καὶ γε αὐθις ἐχομένῳ τῶν ἐξαρχῆς· οὐδὲ γὰρ ἀρετῆς καὶ τῆς κατ' αὐτὴν ἐπιμελείας τὴν τοῦ λόγου προθήσομεν ('so to avoid the want of time and trouble caused by a mass of books and to buckle down once again on the very principles. For we will not prefer the pursuit of reason to virtue and the pursuit of it').

³⁸ Joseph Rhak., *Epitome* 36, line 34.

³⁹ Joseph Rhak., *Epitome* 37, lines 5–6 & 37, lines 24–7: ἐνέκυψα βίβλοις σοφῶν διαφόροις πραγματεῖαις ἐσχολακώτων . . . Ταῦτα δὲ πάντα διελθὼν ἐγὼ μετὰ τὰς διεξοδικὰς ἀνελίξεις τῶν μαθημάτων, θέλων ἐκφυγεῖν τὸ κενόσπουδον, ἔνθεν μὲν τοῦτο, ἐκεῖθεν δ' ἐκεῖνο, ἄλλοθεν δ' ἄλλο, καὶ αὐθις ἀλλάσθην ἕτερον συνερασιζόμενος. Ebbesen (1981) 342, translates θέλων ἐκφυγεῖν τὸ κενόσπουδον as 'not wanting to waste my efforts on vainglorious ostentation of originality', thus strongly emphasising the derivative, unoriginal character of Joseph's *Synopsis*.

had written interesting works on topics similar to the ones he was planning to discuss; he was certainly not the only Byzantine encyclopaedic author who dealt with this wide range of sciences. One cannot deny that he ‘recycled’ passages from other scholars’ compositions, in a way which seems to support the traditional negative judgements about the lack of originality in Byzantine encyclopaedism. Yet, one should refrain from using the derivative character of Joseph’s *Synopsis* as a starting point for this kind of value judgement. Complete originality was clearly not the main aim of the author. At the same time, however, the work did have innovative features. For example, Joseph seems to have inspired and urged his friend Johannes Actuarius to compose a medical work,⁴⁰ with the intention of including this in his *Synopsis*. Moreover, he regularly mixed arguments and passages taken from his predecessors with short comments of his own. By rearranging the material of his predecessors, placing it into a new context, he created a work which was new in significant ways: ‘I joined, one might say like the prophets, bones to bones and harmony to harmony.’⁴¹ Challenging the existing literary, encyclopaedic tradition, he wanted to do better.

First of all, according to Joseph, ‘with his and only his help’⁴² people would reach true and full knowledge, because he was the only one who had really discussed everything. In his prose introduction, Joseph indeed gives a description of the literary production before and during his own time, stating that one had written a compendium on rhetoric, without paying attention to all the other disciplines; another gave an interesting survey of logic and physics, ‘but omitted the most important part of logic, the principle of all knowledge, the famous apodeictic and the well-known and most noble dialectic’; still another wrote just a brief survey of ‘the four mathematical sciences’, without going much into detail; a fourth dealt with the human body, without mentioning the soul, and one who did treat the various functions of the soul omitted a discussion of ethics. By contrast he, Joseph, had discussed ‘all of this and had made it plain and clear.’⁴³ Given the emphasis he puts on the fundamental importance of dialectic

⁴⁰ I.e. Johannes Actuarius’ *De spiritu animalis*; edition in Ideler (1841–2), vol. 1, 321–86. See Hohlweg (1983) 314; Johannes Actuarius, *De diagnosi*, ed. Ideler (1841–2) vol. 2, 481, lines 23–4.

⁴¹ Joseph Rhak., *Epitome* 37, lines 27–8: καὶ συνθεῖς ὅστέα εἴποι τις προφητικῶς πρὸς ὅστέα καὶ ἁρμονίαν πρὸς ἁρμονίαν. Cf. Ezechiel 37.7: ‘So I prophesied as I had been commanded; and as I prophesied, suddenly there was a noise, a rattling, and the bones came together, bone to its bone.’

⁴² Joseph Rhak., *Epitome* 38, line 25: δι’ ὠφέλειαν καὶ μόνην ἐμὴν . . .

⁴³ See Joseph Rhak., *Epitome* 37, lines 6–26. Hannick (1986) 2036, even calls Joseph the first Byzantine match for Martianus’ Capella’s *De nuptiis Mercurii et Philologiae*.

and apodeictic, Joseph seems to be particularly proud of having noticed the incompleteness of Nicephorus Blemmydes' *Epitome logica*, one of the most influential manuals on logic from the Byzantine period and one of Joseph's major sources for his own discussion of logic in his *Synopsis*.⁴⁴ Whereas Blemmydes had not included Aristotle's *Analytica posteriora* or *Topica* in his work, Joseph prided himself on having discussed all the logical treatises of Aristotle.⁴⁵

Moreover, the *oeuvre* of other, traditionally so-called encyclopaedic Byzantine scholars was not only thematically deficient; another problem, according to Joseph, was that it always consisted of many separate books and treatises.⁴⁶ For example, Nicephorus Blemmydes (1197– c.1269), one of Joseph's favourite authors, wrote separate works on logic (his previously mentioned *Epitome logica*), physics (*Epitome physica*), geography (*Abridged history of the earth* and *Synoptic geography*), ethics and asceticism (*De virtute et ascesi*), the soul (*De anima*) and on the human constitution (*De corpore*), besides a good few theological treatises. Georgius Pachymeres (1242– c.1310) was a historian, rhetorician, scientist and philosopher, but wrote individual, specialised works in each of those fields, rather than a comprehensive synthesis. Joseph's friend Nicephorus Gregoras (c. 1290– after 1358) wrote hagiographical, theological, rhetorical and scientific treatises as well as a *Roman History* (*Ῥωμαϊκὴ Ἱστορία*), which makes him one of the most versatile scholars of the fourteenth century. Nicephorus Choumnus (c. 1250–1327), one of the leading scholars of his time, had stated that it was books which were the means of learning and that anyone who pursued higher studies without lots of them acted like a fool and would see all his efforts come to nothing.⁴⁷ Yet Joseph, having himself experienced the problems an 'oversupply' of books could cause when he was young,⁴⁸ rejected this kind of prolific writing, with no clear link between all those

⁴⁴ The only modern edition of the *Epitome logica* of Nicephorus Blemmydes can be found in *PG* 142, coll. 675–1004. Joseph's *Epitome logica* (in the manuscripts entitled *Περὶ πείρας, ἐμπειρίας, τέχνης καὶ ἐπιστήμης, ἐν ᾗ καὶ περὶ τῶν δυναμένων τῆς ψυχῆς*) has not yet been published.

⁴⁵ See Ebbesen (1981) 342–3; Stavrou (2007) 59, n. 2. Most likely, Joseph copied the passages which fill the gap in Blemmydes' treatise on logic from the work of another author, whose identity, however, is still not clear, since, so far, no thorough study has been carried out on Joseph's *Epitome Logica*.

⁴⁶ I will confine myself to several examples from the thirteenth and early fourteenth centuries, Joseph's direct 'competitors', since otherwise a more thorough study of the whole of Byzantine scientific and compilatory literature would be necessary, which would exceed the limits of this chapter.

⁴⁷ Choumnus even compares scholars who do not possess any books with bad craftsmen who are not familiar with the tools of their craft: see Boissonade (1844) 93, 1–16; Constantinides (1982) 143.

⁴⁸ See above, p. 265.

various branches of knowledge. He did not write various separate books, each dealing with one specific topic or science; instead his aim was to compose one useful, continuous *synopsis* of all Byzantine, both ancient and recent, learning, as is shown by his own words:

One unity, simple and continuous, out of various things, that one thing I composed. And I set up this book like a picture of philosophy and the sciences that you can look at, whenever you want, and in which no one will search for a long time nor wander around in circles, but immediately find what is useful.⁴⁹

There are other reasons too for calling the *Synopsis* of Joseph an encyclopaedia. Ilsetraut Hadot has argued that the intrinsic meaning of *enkyklios paideia* was not, in the first place, ‘ordinary education’, but, rather that the concept originally was the result of a long tradition of complex philosophical reflection (especially in neo-Platonic circles) and so referred to ‘complete education’, which could be obtained by passing through the different, but connected, stages of a course or ‘cycle’ of disciplines. On that view the final aim of *enkyklios paideia*, being complete education, was not a thorough knowledge of (mere) details, but a carefully and gradually acquired knowledge of the essence of all those disciplines and sciences, which were all founded on reason.⁵⁰ This was also what Joseph was aiming at with his *Synopsis*, as we can see, for example when he states that ‘a discussion or explanation of the sciences that is more detailed than necessary would be bad and would certainly not be commendable.’⁵¹

⁴⁹ Joseph Rhak., *Epitome* 37, lines 28–32: ὁλομέλειάν τινα μίαν καὶ συνεχῆ ἐκ πολλῶν καὶ διαφόρων πραγματειῶν μίαν ταύτην συνεστησάμην καὶ ὡς εἰκόνα φιλοσοφίας καὶ μαθημάτων τὴν παροῦσαν ἀνεστῆλωσα βιβλόν, ἣ δὴ καὶ τις ἐνατενίζων, ὅσακίς ἐθέλοι, οὐ μακρὰν ζητήσει, οὐδὲ περιθρέζεται κύκλῳ, ἀλλ’ αὐτόθεν ἔξει τὸ χρήσιμον. See also Joseph Rhak., *Verses*, 3–7: ἀλλ’ εἴγε πολλὰς μὴ προσανέχειν θέλεις | βίβλοις ταπολλὰ καὶ δαπανᾷν τὸν χρόνον, | κενὸν τιθεῖς σπουδασμα πάντα τὸν βίον· | ποθεῖς δ’ ἔχειν ἄριστον ἐν βραχεῖ τύπον | ἡθῶν, ἔργων, λόγων τε καὶ θεωρίας (‘if you do not wish to devote yourself mostly to many books nor to waste your time, reducing your whole life to a vain pursuit, but you long for the best model of habits, works, words and contemplation’).

⁵⁰ See Hadot (2005) 469–81, especially 470–1: ‘Le terme technique *enkyklios paideia* . . . ne doit pas être traduit, comme cela a été fait souvent, par “éducation habituelle” ou “éducation ordinaire”, mais par “instruction” ou “culture complète, encyclopédique” . . . Car, loin de designer l’éducation habituellement prodiguée à la jeunesse appartenant aux classes socialement élevées . . . l’*enkyklios paideia* est le fruit de réflexions philosophiques complexes qui, en dernière instance, remontent surtout à Platon, mais ne sont pas non plus étrangères à Aristote. Ces réflexions ont mené à la conviction que tous les arts fondés sur le raisonnement formaient un *corpus* unifié . . . L’*enkyklios paideia* ne voulait pas aboutir à la connaissance des détails, mais à une connaissance de l’essence de chaque art fondé sur le raisonnement’. See also Hadot (2005) 265–8.

⁵¹ Joseph Rhak., *Epitome* 38, lines 16–18: Οὐτε μαθημάτων ὑπὲρ τὸ δέον ἀνάπτυξις . . . καλῶς ἂν ἔχοι καὶ λίαν ἀσφαλῶς τε καὶ ἐπαινετῶς.

Secondly, *enkyklios paideia* represented, in the context of (neo-)Platonism, as mentioned before, a 'cycle' or 'circle' (κύκλος) of different disciplines, since these were connected by what Hadot⁵² calls an 'interior unity'. It was assumed that, once one had mastered one discipline, one would (more) easily grasp the essence of the other sciences. It was also assumed that one must study all the other disciplines before being able to completely master one. According to the (neo-)Platonists, this interior unity was guaranteed by the dialectical method.⁵³ Although the latter was greatly appreciated by Joseph,⁵⁴ he pushed things even further, claiming that all the encyclopaedic sciences are not just linked to one another through method, but are also, as will be explained further, intrinsically strongly intertwined – an opinion which set Joseph somewhat apart from his contemporaries.

Ad maiorem Dei gloriam

From their Greek ancestors, the Byzantines inherited a whole treasury of so-called secular learning, referred to as ἡ ἔξω σοφία, 'outer wisdom' – the study of which was called θύραθεν, 'learning beyond the door'. Christian doctrine, on the other hand, was καθ' ἡμᾶς, 'our learning'.⁵⁵ The inner struggle of Byzantine civilisation, which was based on this opposition, divided Byzantine society, since each kind of 'wisdom' had its own supporters. On the one hand, there were those, especially monks, who completely rejected any aspect of pagan learning. In Joseph's time, one of the most fervent representatives of this group was the ascetic monk Athanasius, twice patriarch of Constantinople (i.e. from 1289 to 1293 and from 1303 to 1309), who proclaimed that man could find salvation only in God and the holy scriptures and by no means in the philosophical and scientific texts of pagans like Aristotle.⁵⁶ On the other side of the scales were scholars like Joseph's friend Theodorus Metochites (1270–1332), who were proud to be the heirs of the great, rational spirit and wisdom of old Greece. In Joseph's view, however, there was no reason why strictly adhering to 'outer wisdom' would imply a rejection of, or danger for, 'our learning' and vice versa, since faith and *ratio* went hand in hand, with neither of them able to stand without the other.

⁵² See Hadot (2005) 268; 472. ⁵³ See Hadot (2005) 265–6; 472–5. ⁵⁴ Cf. *supra*, pp. 266–7.

⁵⁵ See, e.g., Basilios Caesariensis, *Ad adolescentes*, 2.39–47. Many modern Byzantine scholars have discussed this topic. See, e.g., Bréhier (1941) 59–63; Dölger (1953); Nicol (1969) *passim*; Runciman (1970) *passim*, but especially 27–35; Meyendorff (1971) *passim*; Podskalsky (1977) 16–48; Nicol (1979) 31–65.

⁵⁶ On patriarch Athanasius, see, e.g., Meyendorff (1971) 59–62.

According to Saint Basil, Christian scholars, in their relation to pagan learning, should act like bees, which ‘possess the power to get’, besides fragrance and colour, ‘honey from flowers as well. So it is possible here also for those who are pursuing not merely what is sweet and pleasant in such writings to store away from them some benefit also for their souls’.⁵⁷ Church fathers, like Clement of Alexandria, considered the ‘earthly’ sciences as no more than propaedeutic to the highest truth, theology – an opinion that persisted throughout the whole Byzantine period.⁵⁸ According to Joseph, however, these ‘lower’ sciences, like rhetoric and mathematics, were not subordinated to theology, but, being more than just the *ancilla* (handmaid, servant) of the highest wisdom, the ‘longing for education and the sciences was a close fellow worker (συνεργόν) of the highest and loftiest desire for beauty and for truly perfect happiness’.⁵⁹ The study of natural phenomena offers, he suggests, the chance to contemplate God, since ‘nature is the instrument of creation, the creative cause of all things’.⁶⁰ In the same way, by penetrating the secrets of the human soul, ‘you will glorify above all the creator of the world, after having seen the indescribable process of creation’.⁶¹

Of course, to proclaim that the study of earthly things can be a useful starting point for someone aiming at the most supreme knowledge was not, in the fourteenth century, a pioneering or novel idea. When Joseph compares, for example the τετράς μαθημάτων (‘group of four sciences’, i.e. *quadrivium*) to ‘a ladder lying somewhere in the middle of the natural and intelligible world, which brings you in a wonderful and rational way out of

⁵⁷ Basilios Caesariensis, *Ad adolescentes* 4.7–8. Translation from Geanakoplos (1984) 394. A similar statement can be found in Johannes Damascenus, *Dialectica*, prooemion, 43–65.

⁵⁸ See Fuchs (1926) 42–5. The study of doctrines of the ancient Greeks was tolerated only for the purpose of instruction: Τοῖς τὰ ἑλληνικὰ διεξιοῦσι μαθήματα καὶ μὴ διὰ παιδευσιν μόνον ταῦτα παιδευόμενοι, ἀλλὰ καὶ δόξαις αὐτῶν ταῖς ματαίαις ἐπομένους καὶ ὡς ἀληθεῖσι πιστεύουσι, καὶ οὕτως αὐταῖς ὡς τὸ βέβαιον ἐχούσαις ἐγκειμένους, ὥστε καὶ ἑτέρους ποτὲ μὲν λάθρα, ποτὲ δὲ φανερώς ἐνάγειν αὐταῖς καὶ διδάσκειν ἀνεκδοιάστως, ἀνάθεμα (*Synodikon*, ed. Gouillard (1967) 59, lines 214–18: ‘To those who study Hellenic sciences and do not take them as tools of instruction only, but follow their futile theories and accept the latter as true, and so are completely in to them, as if reliable, so that they, sometimes secretly, sometimes openly, initiate also others into them and instruct them unhesitatingly, anathema’)

⁵⁹ Theodorus Metochites, *To a friend*, ed. Treu (1899) 8, lines 12–15: τῆς δὲ περὶ τὴν παιδείαν τέως καὶ τοὺς λόγους σπουδῆς ὑπερβαλλόντως ἀντιποιεῖται, συνεργὸν τὸν ἐν τούτοις πόθον πρὸς τοὺς ἀνωτάτω καὶ ὑψηλοτέρους πόθους τοῦ καλοῦ καὶ τῆς τελείας ὄντως μακαριότητος εἰκότως κρίνων.

⁶⁰ Joseph Rhak., *Verses* 52–3: Φύσις γάρ ἐστιν ὄργανον τεχνουργίας, | τῆς παραγωγῆς τῶν ἀπάντων αἰτίας.

⁶¹ Joseph Rhak., *Verses* 63–4: Καὶ δοξάσεις μάλιστα τὸν κοσμεργάτην, | ἄρρητον ἰδὼν δημιουργίας τρόπον.

the material world to immaterial being,⁶² Joseph is simply remaining true to the tradition started by Plato. Yet, whereas for others 'earthly' sciences were merely a possible step (besides others) to theology, they are in Joseph's view essential and indispensable; the reader of Joseph's *Synopsis* moves gradually from one science to another, which all bring him to his supreme aim, i.e. to understand the whole creation and, as a result of this, to honour God, the creator, through reason (rhetoric and logic), through an understanding of the cosmos (physics, mathematics) and through an understanding of the soul (ethical philosophy).

In his *Ethica Nicomachea*,⁶³ Aristotle explains that there are three different modes of living. In the first place, there are 'the most vulgar people' (οἱ μὲν πολλοὶ καὶ φορτικώτατοι), who 'identify the Good with pleasure and therefore are content with the life of enjoyment'. Beside them, there is the 'life of politics' (πολιτικός) 'and, thirdly, the life of contemplation' (θεωρητικός). While Joseph, in his prose introduction, does not really discuss the 'life of enjoyment', he does analyse the 'political life'. He does not reject it as being completely worthless, but since the *politikos* does not always take reason as his guide and often ties himself strongly to earthly things *an sich*, Joseph vigorously prefers the 'theoretical life', since only a man who devotes his life to study and reason, knows what is truly beautiful and what not, using the sciences to guide his mind.⁶⁴

Yet, at the same time, he also states that one may be surprised that a monk, who is supposed to focus with heart and soul on God, pays so much attention to secular learning.⁶⁵ Although other ecclesiasts may have preceded him in this respect,⁶⁶ the fact that Joseph himself points firmly to this possible surprise and disapproval, may be an indication that in his time, it was not accepted as easily by all. One particular reason for his statement

⁶² Joseph Rhak., *Verses* 69–73: Ἐξῆς δὲ τούτων ἡ τετράς μαθημάτων | δίκην κλίμακος ἐν μέσῳ πῶς
κειμένη | τῶν φυσικῶν ὁμοῦ τε καὶ νοουμένων | θαυμασίως ἄγει σε καὶ κατὰ λόγον | ἐκ τῶν
ύλικῶν εἰς ἄυλον οὐσίαν.

⁶³ Arist. *EN* 1095b 16–19.

⁶⁴ Joseph Rhak., *Epitome* 34, line 7 – 35, line 26. See especially 35, lines 14–18: μόνος γὰρ ἐκεῖνος
(i.e. ὁ θεωρητικός) λόγῳ ζῶν ἀσχέτως καὶ θεωρίας ἀκραιφνοῦς ἐπιβαίνων . . . οἶδε μὲν ἄληθῶς τὸ
καλὸν, οἶδε δὲ καὶ τὸ αἰσχρὸν, καὶ τῷ μὲν προστίθεται, τὸ δ' ἀποπέμπεται ('For only he
absolutely lives according to reason and treads the path of pure contemplation . . . he truly
knows beauty as well as ugliness, and he cleaves to the former and keeps away from the latter').

⁶⁵ See Joseph Rhak., *Epitome* 38, lines 8–12.

⁶⁶ Maximus Planoudes (c. 1255 – c. 1305), for example, 'abandoned all prospects of a successful
career and dedicated himself to a life of scholarship within the confines of a monastic life . . . By
devoting himself entirely to learning he succeeded not only in becoming the most erudite and
prolific writer of his period, but also in opening new paths and arousing fresh interest in a
number of subjects which had hitherto remained neglected', like astronomy (Constantinides
(1982) 66).

may be the fact that he was not one of those religious figures who, in holding an executive position, had to deal frequently with political and more earthly issues.⁶⁷ Joseph instead, ‘never owning a knapsack, second garment, shoes’⁶⁸ or money, preferred the wandering life of a saint or mystic – focusing on God and contemplation.⁶⁹ This is probably the reason why he, each of the four times he was offered the office of Patriarch of Constantinople, declined this great honour,⁷⁰ and supposedly why at the end of his life, ‘unable to hide his lamp under a bushel’,⁷¹ he exchanged the lively political centre of the Byzantine empire for the smaller provincial city of Thessaloniki.

Another explanation for Joseph’s firm statement might be the gradually growing influence of the hesychastic movement in his time.⁷² The term ‘hesychasm’ originally referred to the experience of Christian monastic life, based on eremitism, contemplation and ‘pure prayer’.⁷³ The central idea was that God reveals himself to man in immediate communion. Georgius Palamas (c. 1296–1359), the main representative of hesychasm, put the emphasis on the distinction in God between his transcendent and unknowable essence (οὐσία, ‘God as God is’) and his divine and uncreated energies (ἐνέργεια), or his grace and actual operations in the world, through which man can still acquire knowledge of God and can participate in the divine. According to Palamas, who had himself been a pupil of Theodorus Metochites when he was young, and had thus received an excellent education in, among other things, Aristotelian philosophy, it was not to be denied that pagan, secular learning had some value for laymen, yet for monks, it did nothing but hinder them in their mystical quest for God. He states, for example, that ‘the Lord did not expressly forbid scholarship, but neither did he forbid marriage, or the eating of meat, or cohabitation between married persons’; and that ‘there are many things that ordinary Christians may do which are strictly forbidden to monks by reason of their special way of life’.⁷⁴ Although the real hesychastic controversy between Palamas and his main opponent Barlaam of Calabria (c. 1290–1348) broke out only after Joseph’s

⁶⁷ Georgius Pachymeres, for example, was a deacon and member of the patriarchal clergy.

⁶⁸ Theodorus Metochites, *To a friend*, ed. Treu (1899) 12, lines 31–3: οὐδὲν ἐπιφερόμενος, οὐ πῆραν, οὐχ’ ἱμάτιον ὀπιθοῦν δεύτερον, οὐχ’ ὑποδήματα.

⁶⁹ Magdalino (2006) 153 remarks that the picture Metochites draws of Joseph in his letter *To a friend* resembles hagiographical models.

⁷⁰ See Theodorus Metochites, *To a friend*, ed. Treu (1899) 25, lines 21–7. See also Darrouzès (1977) numbers 2000, 2028, 2100.

⁷¹ Cantacuzenus, *Historiae*, 1, 7, 9–10: τὸν λύχνον ὑπὸ τὸν μόδιον κρύψαι, οὐκ ἡδυνήθη. Cf. Matthew 5.15: ‘No one after lighting a lamp puts it under the bushel basket, but on the lampstand, and it gives light to all in the house’.

⁷² See especially Meyendorff (1971) and (1974). ⁷³ See Meyendorff (1974).

⁷⁴ Palamas, *Pro hesychastis*, ed. Meyendorff (1973), 2.1.35. See Nicol (1979) 51.

death, it is not unreasonable to assume that similar ideas had already been gaining increasing acceptance before – which might explain why the wandering monk Joseph had to account for his devotion to secular learning. In his *Synopsis*, Joseph anyway always remains committed to the superior truth of Christianity. For the first part of the treatise *De anima*, e.g., Joseph bases himself on Aristotle – copying Pachymeres' paraphrase of Aristotle's *De anima* – while the second part consists of Christian ideas on the soul. At the beginning of the latter, Joseph emphasises that only the second part of his exposé is completely true, 'because what the Greeks philosophised about the soul has been shown to be vain', whereas his theories are inspired by 'the truth manifested in Christ' himself.⁷⁵

The question remains, however, whether Joseph did actually realise his ambitious plan of writing one comprehensive work, excellently structured and organised, and which really was qualitatively different from and superior to the works of his predecessors. A definitive answer would require a thorough study of the whole *Synopsis variarum disciplinarum*. Nevertheless, we can perhaps give a preliminary answer, taking Joseph's treatise *De virtute* (Περὶ ἀρετῆς)⁷⁶ as a case study.

The core of this treatise consists in the previously mentioned *De virtute et ascesi* (Περὶ ἀρετῆς καὶ ἀσκήσεως) of Nicephorus Blemmydes. Joseph supplements this text with, among other things, a passage taken from the *oeuvre* of the seventh-century Byzantine theologian and saint, Maximus the Confessor.⁷⁷ In doing so, he offers a more thorough discussion of the virtues than Blemmydes, 'making one unity, simple and continuous, out of various things'.⁷⁸

Yet, this continuity does not seem to cross the boundaries of the various individual treatises which the *Synopsis* contains. At the beginning of his *De virtute*, Joseph does state that he will first discuss the right way of acting before discussing the right doctrine,⁷⁹ thus linking this treatise with

⁷⁵ Riccardianus Gr. 31, folium 225^r: τὰ δὲ γε ἡμέτερα τῶν ἀπὸ Χριστοῦ τῆς αὐτοαληθείας κεκλημένων, ἔχουσιν οὕτω· καὶ ἔχουσὶ γε ἀληθῶς· . . . ὅσα γὰρ περὶ ψυχῆς ἐφιλοσόφησαν Ἕλληνες, μάταια ἀπεδείχθησαν.

⁷⁶ A critical edition and English translation of this ethical treatise formed the core of my PhD dissertation. The Greek text will be published in the *Series Graeca* of the *Corpus Christianorum* (Brepols).

⁷⁷ On the relation between the *De virtute* of Joseph Rhakendytès and its sources Nicephorus Blemmydes and Maximus the Confessor, see Gielen (2011) and the introduction of my critical edition of Joseph's *Περὶ ἀρετῆς* (Gielen (forthcoming)).

⁷⁸ Joseph Rhak., *Epitome* 37, lines 28 and following (discussed also above).

⁷⁹ See Joseph Rhak., *De virtute*, lines 3–6: περὶ τοῦ ὁρθοῦ δόγματος ἐν ἐπιτομῇ μέλλων διαλαβεῖν, εἰκότως πρότερον περὶ τῆς ὁρθῆς πράξεως τὸν αὐτὸν τρόπον ἐκθεῖναι προήρημαι ('I decided, with the intention of discussing in brief the right doctrine, to discuss similarly the right way of acting in the same way first').

the following one in his *Synopsis*, i.e. the *De pietate* (Περὶ εὐσεβείας), which seems to be a compilation of Nicephorus Blemmydes' *De fide* (Περὶ πίστεως) and the *Expositio Fidei* of John Damascene.⁸⁰ But there are no other cross-references found in the text, even though he could have added them, for example when discussing briefly the different parts and faculties of the soul by referring to similar passages in his treatise on the soul, the *De anima* (Περὶ ψυχῆς), which would have helped to emphasise the continuity and unity of his whole *Synopsis*. Besides, the link, just mentioned, between the *De virtute* and the *De pietate* is not even Joseph's own innovation, but was simply copied from his source Blemmydes, who had stated that he would first discuss the right doctrine (i.e. his *De fide*) and after that the right way of acting (i.e. his *De virtute et ascesi*);⁸¹ Joseph only changed the order of Blemmydes' two treatises.

Furthermore, the general impression we get of the whole *Synopsis* is of a collection of various independent treatises which happen to be placed in one codex, one after another, without any transitional notes added by Joseph to link one treatise with the next. Undoubtedly, Joseph's *Synopsis* has its merits. It offers a systematic overview and classification of the various disciplines of higher education and combines the works of different authors on related topics, as for example in the *De virtute*. It could have been a very handy tool, containing (according to Joseph) everything one should know. However, as far as we can tell from the manuscript tradition, it is clear that in many cases it was not considered as an entity to be read completely from beginning to end, as most manuscripts contain only one or just a few sections of the *Synopsis variarum disciplinarum*, allowing them to be read independently.

Conclusion

In his *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers*, Diderot in the eighteenth century defined the term encyclopaedia in the following terms:

⁸⁰ See Conticello (1995).

⁸¹ See Nicephorus Blemmydes, *De virtute et ascesi*, lines 8–11: περὶ τοῦ ὀρθοῦ δόγματος ἐν ἐπιτομῇ προδιαλαβὼν, εἰκότως καὶ περὶ τῆς ὀρθῆς πράξεως τὸν αὐτὸν τρόπον ἐπιδιαλαβεῖν οὐ κατώκησα ('having discussed first in brief the right doctrine, I did not shrink from discussing the right way of acting as well in the same way'). A critical edition of this text will appear in my forthcoming volume in the *Series Graeca* with the critical edition of Joseph's *De virtute* (Gielen (forthcoming)).

Le but d'une encyclopédie est de rassembler les connaissances éparsés sur la surface de la terre, d'en exposer le système général aux hommes qui viendront après nous . . . Quand on vient à considérer la matière immense d'une encyclopédie, la seule chose qu'on aperçoive distinctement, c'est que ce ne peut être l'ouvrage d'un seul homme. Et comment un seul homme, dans le court espace de sa vie, réussirait-il à connaître et à développer le système universel de la nature et de l'art?⁸²

As a matter of fact, the aim Joseph had with his *Synopsis* was somewhat similar: to gather all knowledge, ancient as well as recent, covering the whole area of human and divine sciences, to the sole purpose of fathoming the mystery of creation. He did not aspire to complete originality. However, it is also clear that he did not just make use of the vast literary and scientific tradition; at the same time, he also challenged it and reshaped it, working within the ancient tradition of *aemulatio*. Although Joseph did not explicitly refer to the so-called *enkyklios paideia*, from which the modern term encyclopaedia is derived, his *Synopsis* should be viewed particularly against the background of classical and Byzantine (higher) education and the cultural situation of his time. Whereas tuition at the various educational institutes was primarily intended to be 'useful' and practically oriented, i.e. to create future officials and politicians, the aim of Joseph's literary work was to arouse words of praise for 'the one who has given and provided all good, God',⁸³ and at the same time to lay out the basis of a moral education. Moreover, at the end of his prose introduction,⁸⁴ he expresses the hope that those who have learned something from him will, in their turn, show the way to other inquisitive young people. Unfortunately, the manuscript tradition of Joseph's *Synopsis* seems to indicate that Joseph's ambitious plan did not achieve its goal, as there are only three surviving manuscripts which contain the whole *Synopsis*, which suggests that it was not considered as a new standard work that could replace all the other manuals and specialised treatises. Nor is there any evidence that any reader of Joseph's *Synopsis* used this monumental work as a basis for teaching new students.

Nonetheless, looking at Joseph's *Synopsis* offers us a valuable and very distinctive insight into fourteenth-century Byzantine culture and 'encyclopaedism'. For Byzantine history has too often been depicted as an example of cultural stagnation, with its derivative 'encyclopaedias' adduced as evidence. However, with his attempt to offer a well-structured and harmonised overview of all the different disciplines, Joseph proves that he,

⁸² Quotation from Hadot (2005) 469.

⁸³ Joseph Rhak., *Epitome* 38, lines 21–2: τῷ τῶν ἀπάντων ἀγαθῶν δοτῆρι καὶ παροχεῖ θεῷ.

⁸⁴ See Joseph Rhak., *Epitome* 38, lines 21–8.

as a Byzantine ‘encyclopaedist’, wants to do much more than just copying and reproducing. Although at its end the Byzantine empire continuously suffered great loss of territory, the fourteenth century was marked both by a cultural renaissance, and by a revival of orthodoxy and spirituality. With his own encyclopaedic composition, and his distinctive way of life, Joseph seems to represent both.

13 | Shifting horizons

The medieval compilation of knowledge as mirror of a changing world

ELIZABETH KEEN

Debates and definitions

Manuscript and printed versions of medieval encyclopaedic texts span the centuries from the early Middle Ages to the early modern period. The origins and development of this kind of writing, the manuscript traditions, and the reception histories of individual works are well-dug fields of historical research, but the boundaries of an encyclopaedic ‘genre’ and a precise definition covering content, form and function, have been hard to establish. Michael Twomey categorises encyclopaedic texts as ‘major’ and ‘minor’ according to their medieval reception and longevity; according to Bernard Ribémont ‘empirical investigation reveals a central core, with a range of satellites and one text that is clearly fundamental’. The latter is generally agreed to be Isidore of Seville’s *Etymologiae*, while the well-known ‘core’ includes the later medieval works of Alexander Neckam, Thomas of Cantimpré, Bartholomew the Englishman and Vincent de Beauvais. Compilations deemed to be ‘satellites’ include those of Hrabanus Maurus, Bede, Lambert of St Omer, Hildegard of Bingen and Honorius Augustodunensis, but this is by no means a comprehensive list.¹

It is common now to see medieval ‘encyclopaedic’ writing as a category that can include many different kinds of text such as medieval *mappaemundi*, world histories, and preaching manuals, according to the special focus desired by the compiler. William N. West sees both the medieval encyclopaedia and the early theatre as possible ‘theatres of learning’, imaginary spaces in which moral lessons can be enacted with the willing involvement of an audience.² The important linking factor is a salvatory and penitential primary purpose that tends to present the finite world as a metaphorical ‘mirror’ or ‘covering’ of the eternal and divine. Christel Meier, for example,

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¹ Twomey (1988) 198; Ribémont (1997). ² West (2002) 30–4, 63.

suggests that we need to think of the genre as a set of variations on an *imago mundi* intended to provide a morally useful guide to salvation through awareness of divine truths preserved by the fathers of the church; a digest of essential Christian texts for the book-deprived scholar; and an account of the world's history as taught by scripture. Within this common aim, each compiler chooses an appropriate method of organising and setting out the content to reflect divine order and to counteract the sense of worldly life as meaningless chaos. The world-book of the Middle Ages combines representations of the world with the metaphor of the world as a book, that is, an imperfect image of the created world that can usefully be read and interpreted as a guide to salvation.³

There is general agreement among modern scholars that the purpose of the encyclopaedic compilation was to make available a body of orthodox doctrine, based on the scriptures and their interpretation by the church fathers, to be studied for devotion and learning, and fashioned into appropriate lessons for the Christian congregation. In Michael Twomey's words, 'A medieval encyclopaedia was an educational text describing the natural and human worlds that was used primarily within an institutional setting such as a monastery, cathedral school, or university'.⁴ However, as Peter Burke notes, the job of the medieval schools was not to explore beyond the boundaries of the known but to preserve and pass on a fixed body of authorised knowledge for the exclusive use of 'clerisy': clerics, masters of letters, philosophers and 'literate men' (*clerici, magistri, philosophi, viri literati*).⁵ Winthrop Wetherbee, quoting Richard Southern on the twelfth-century cosmologists of the school of Chartres, emphasises that 'they all used the same methods, they all drew their ideas from ancient texts, and often from the same ancient texts, which kept reappearing in all areas of study'.⁶

In spite of the conservative nature of the content, these compilations show an imaginative variety of shape and form that can be both intriguing and problematic for the historian. For one thing, each reflects the cultural and political environment, focal concern, and personality of the compiler. For another, the medieval concept of 'world' is itself complex and multi-faceted, a teaching point emphasised, as we shall see, by some of the compilers themselves. Another complicating factor is that, as repositories of classical as well as Christian authorities, the compilations were potentially useful as sources of factual information for the Latinate physicians, lawyers and clergy operating in the world outside the monasteries. By the early modern

³ Meier (1997).

⁴ Twomey (2006).

⁵ Burke (2000) 21.

⁶ Wetherbee (1988) 28.

period we find medieval compilations of knowledge adapted for a range of practical and professional purposes, but later perceptions of these have been affected by what David Greetham calls ‘the impossible task, which motivated so much medieval thought, of reconciling classical science (even pseudo-science) with revealed Christian truth.’⁷ A third factor is that each major compilation of knowledge has a political aspect visible in dedicatory prologues to the individual who footed the bill or commissioned the work. The compilation of knowledge not only preserves authoritative texts but can be manipulated to confer a mantle of authority on those associated with it.

It is arguable then, that a more flexible definition of the genre might be desirable, one that refers to the variety of viewpoints and capacity for adaptation demonstrated by some long-lived compilations, and to the reader’s active role as interpreter of the information given. Passages from a small sample of encyclopaedic texts, dating from the early to the late Middle Ages, serve here to test how some compilers reflect themselves and their expected readers against the background of their own times and cultures: these are the *Etymologiae* of Isidore of Seville (compiled c. 640), *De rerum naturis* of Hrabanus Maurus (c. 850), the *Imago mundi* of Honorius Augustodunensis (c. 1130) and *De proprietatibus rerum* of Bartholomew the Englishman (c. 1240). Lastly, an illustration in the manuscript of a late medieval translation of Bartholomew, made in 1309 for a non-clerical patron, suggests a contrasting conception of the world of things, people and knowledge. This is a tiny sample with which to try to characterise a highly productive mode of compilation that persisted across Europe for a thousand years; but it gives us a tool for comparison, a means of demonstrating that while compilers over that span might share sources, aims and assumptions about the world, each of them did so in an idiosyncratic way that reflected his or her own immediate world of place and time.

Isidore of Seville and the amphitheatre of life

In the recent translation by Stephen Barney and others of the *Etymologiae*, compiled during the first half of the seventh century, the introduction details the little that is known about Isidore and the evidence for, and context of, his scholarly work.⁸ Born in about 560, he came with his family

⁷ Greetham (1992) 69–83.

⁸ Barney, Lewis, Beach and Berghof (2006) 4–19. Barney’s translation is based on the Latin text edited by Lindsay (1911), available at penelope.uchicago.edu/Thayer/E/Roman/texts/Isidore/home.html (last consulted 11/2/13).

as a child to Seville, probably to escape the Byzantine invasion in Cartagena, received a monastic education and eventually inherited the bishopric of Seville from his brother in about 600. He possibly became a tutor and friend to the young King Sisebut. A succession of depositions and assassinations in the royal household indicates the instability of rule in Isidore's time, reasons for which include revolts by Gothic nobles and conflict between proponents of the Arian and Catholic forms of Christianity. The tasks of conversion, peace-making and teaching were thus central to Isidore's pastoral work. His writings were quickly disseminated, thrived a century later in the Carolingian educational programme that spread through the networks of Alcuin's pupils in Italy, Gaul and Ireland, and greatly influenced Anglo-Saxon intellectual life. Bede made extensive use of it, as well as Hrabanus Maurus and others. Isidore's influence thereafter pervaded the scholarship of medieval Christendom up to the fifteenth century.⁹

The contents of the *Etymologiae*, made at the request of Isidore's patron Bishop Braulio, appear to provide educational material and instruction, both practical and spiritual, for clerics in a multicultural setting of political violence and religious warfare.¹⁰ The twenty books can be described as a sequence of three main categories of required knowledge: educational matters and accoutrements, including the basic tenets of the faith and the seven liberal arts (Books 1–6); pastoral instruction including a basic teaching bestiary (Books 7–12); and geographical, ethnographic and cultural matters (Books 13–20). In [chapter 14](#), Andy Merrills discusses the complex structure of the work, Isidore's emphasis on the library and its accoutrements, and the central importance of language and names in Isidore's teaching.

In each of these categories the human figure acts as a focus for Isidore's teaching, sometimes by contrast with the non-human or the monstrous. Thus Noah's three sons, founders of the world's three populations, are implicit in the description of the geographical earth and its parts in Book 14, 'On the globe':

The globe derives its name from the roundness of the circle . . . Indeed, the Ocean that flows around it on all sides encompasses its furthest reaches in a circle. It is divided into three parts, one of which is called Asia, the second Europe, the third Africa. (*Etymologiae* 14.2.1)

This description accords with the so-called O-T map found in the earliest manuscripts of Isidore's *De natura rerum* and later copied in manuscripts of the *Etymologiae*. Some versions of this diagrammatic map include the names

⁹ Barney *et al.* (2006) 24–7.

¹⁰ Henderson (2007a) 210, comments that Isidore is supplying an authorised account of the world recognisable to 'Judaeo-Helleno-Roman-Christian-Visigothic-Spanish-Catholicism'.

of Shem, Ham and Japhet, founders of Asia, Africa and Europe respectively, within the sections. As David Woodward indicates, the O-T map and the concept of the world it represents occur early in the tradition of tripartite (and also quadripartite) world maps that would culminate in the complex *mappaemundi* of the late Middle Ages.¹¹

Numbers and their symbolism are fundamental to the compilers' aims. While the maps divide the world into three or four regions, many of the written compilations have a hexameral form. As Isidore states in Book 3, 'On mathematics', in the chapter on the importance of numbers, they demonstrate divine order and harmony: the number six, for example, declares the completion of creation in six days and the whole temporal dimension of *mundus* as a sequence of six ages, at the end of which our souls will be weighed and measured.¹² In Book 5, 'On Laws and Times', he chronicles the six ages up to his own day, establishing a hexameral account of Christian history that would persist throughout the Middle Ages. In Isidore's account, the world's first age lasts from the creation to the Flood; the second, from the tripartite division of the world by Noah's sons, and the building of Babel, to the life of Abraham and Zoroaster's invention of magic; the third age from the lifetime of Abraham to those of Samuel, Saul and Homer; the fourth, from the reign of David and the founding of Carthage by Dido, to Nebuchadnezzar's capture of Judea and the burning of the temple of Jerusalem; the fifth, from the captivity of the Hebrews to the reign of Julius Caesar; the sixth, from the birth of Christ to the conversion of the Jews in Spain during the reign of the 'most religious ruler Sisebut', in 'the year 696 of our era'.¹³ Isidore's account is both world history and chronicle of his own age and ruling dynasty, and incorporates characters of note from the whole range of literary sources available to him and from his own times. Homer, Abraham, Zoroaster and Dido rub shoulders with Noah, Alexander the Great, the emperor Trajan, and Sisebut himself. This diverse cast of characters becomes a rich resource from which medieval writers and preachers develop exemplars of various vices and virtues, some of which will appear below.

Isidore's image of the world contains not only human figures living in past and present times, but also invisible and divine beings he wishes to make credible and monsters from pagan belief he wishes to discredit. In Book 7, 'On God, angels and saints', Isidore describes the names, ranks and actions of the nine orders of angels in general and particular, basing his descriptions and etymologies on passages from scripture. The modern

¹¹ Book 14, Barney *et al.* (2006) 285. On Isidorean O-T maps in mss from the twelfth to the fifteenth century see Woodward (1987) 343–7; Destombes (1964) planches B and C.

¹² 3.4, Barney *et al.* (2006) 90. ¹³ Barney *et al.* (2006) 130–3.

reader might gain the impression of a vast company of executives and administrators, ceaselessly busy on behalf of the Father, Son and Holy Spirit whom Isidore treats in the first chapters of the book. For medieval believers Isidore arguably confirms the presence of angels as inhabitants of the sublunar world, having a supervising role over mortals but existing beyond the boundary of our vision.¹⁴ Meanwhile in Book 11, 'On man and portents', Isidore challenges pagan beliefs in other supposed beings beyond normal perception, such as the Hydra, as monstrous and contrary to nature, symbols of heresy, though also created by divine will.¹⁵ In Book 8, 'On the church and sects', Isidore details the names and characteristics of deviant beliefs at large in his world: Jewish heresies, Christian heresies, pagan philosophies and fictions, oracles, magic and idolatry. He states that it is the pastor's task to help the flock make proper choices and remind them of angelic supervision.¹⁶ There is a strong sense of the invisible world in Isidore's work: that which is beyond the bounds of human vision, such as the world of angels, and that which is non-recoverable from the past. At the beginning of Book 9, 'On languages, nations, reigns, the military, citizens, and family relationships', Isidore tells us that 'the diversity of languages arose with the building of the Tower [of Babel] after the Flood'; an incentive for his work is that the truths underlying all we discern are obscured by the confusion of postlapsarian human life. Isidore muses on the loss of the true names of things: 'It is hard to determine what sort of language God spoke at the beginning of the world'.¹⁷

In the last section of the work, Books 13 to 20, Isidore makes the reader aware of the Christian individual within the mystical, physical and social worlds, making a distinction between *mundus*, *orbe* and *terra*. He describes the world from an observer's point of view, first from a heavenly, and then from a gradually nearing perspective, and eventually at the earthiest level of things recognisable to the reader. In Book 13, 'On the world and its parts' (*De mundo et partibus*), he presents the mystical view of *mundus* as divine creation and eternal motion (later echoed by Hrabanus Maurus), based on St John's Gospel:

The world consists of the sky and the land, the sea and the creations of God within them. Whence it is said (John 1:10): 'And the world was made by him'. 'World' (*mundus*) is named thus in Latin by the philosophers, because it is in eternal motion (*motus*), as are the sky, the sun, the moon, the air, the seas. (*Etymologiae* 13.1.1)

¹⁴ 7.5, Barney *et al.* (2006) 160–2. ¹⁵ 11 Barney *et al.* (2006) 243–6.

¹⁶ Book 8, Barney *et al.* (2006) 173–90. ¹⁷ 9.1.11, Barney *et al.* (2006) 192.

Then in Book 14, 'On the globe' (*De orbe*), in the section on the earth (*terra*) and its parts, Isidore brings us closer to the earth's uneven surface of mountains and hollows as he describes the continents of Asia, Africa, Europe and also Spain's close neighbour Libya.¹⁸ Finally in Book 19, 'On ships, building and clothing', we find descriptions of topics familiar from everyday experience: buildings and fields, stones and metals, work and leisure activities, clothing and utensils. While we do not know how accurately he reflects his society, Isidore gives us, in these last chapters, a very concrete sense of a sophisticated and intermixed material culture. In descriptions such as that of the *palla*, a woman's square cloak that hangs down to the feet, has gemstones at the hem, and is so called because 'as it sways it ripples in fluttering folds', we perhaps glimpse something of the vital and distracting world in which Isidore lived and worked.¹⁹

The tone of all this information is expository, but in Book 18, 'On war and games', in the course of giving further detailed information about military matters and public ceremonies, including various athletic and equestrian events held in the amphitheatre and 'the colours worn by horses', Isidore suddenly turns (as it were) and confronts the reader with emphatic direct address:

Hence, Christian, you should pay attention to the fact that unclean divinities possess the circus. For this reason that place, which many of Satan's spirits have haunted, will be alien to you, for the devil and his angels have entirely filled it. (*Etymologiae* 18.41.3)²⁰

The warning is dramatic, the theatricality of this section striking.²¹ While we do not know that Isidore intended his readers to understand the contained social *melée* of the circus as a metaphor for worldly life, the modern reader may reasonably ponder it as such, especially in the light of West's argument, and of some much later theatrical representations of the world such as the fifteenth-century *Castle of Perseverance*, Zwinger's *Theatrum humanae vitae* (1565), and the Theatre and the Globe theatre buildings discussed elsewhere in this volume.²²

In Isidore's work, then, the 'seen world' is represented as being all around the Christian, who must be discerning and make the right moral choices; recalling (perhaps while pondering what to wear to the circus) that both evil spirits and ranks of angels oversee his or her decisions. The 'unseen world of God' is also present: in the true meanings (attested by literary

¹⁸ 14.1–5, Barney *et al.* (2006) 285–93. ¹⁹ 19.23 and 19.25, Barney *et al.* (2006) 385, 387.

²⁰ Barney *et al.* (2006) 369. ²¹ Henderson (2007a) 193. ²² See Rhodes, [chapter 21](#).

and scriptural examples) of names belonging to everyday things, and in the invisible world of spirits; in the perfection of numbers as shown in holy writ. Isidore presents the world as *mundus*, *terra* and *orbs* – cosmic mystery, temporal sequence, human society and its ecumenical spread – but also as pagan amphitheatre containing delusive and dangerous pursuits.

Hrabanus Maurus and *mundus* moralised

For medieval historians Isidore stands as the founder of the compilatory tradition, a seminal figure in the early medieval world. L. D. Reynolds however, discussing the transmission of classical texts into early-modern times, shows that Isidore was the inheritor of a dying classical culture, the vital preserver and transmitter of ancient texts through a time when vast numbers of these were becoming lost and before the Christian west had produced many texts of its own. From Isidore's time onwards there was a burgeoning of textual composition and transmission as the Roman, Irish and Celtic churches established libraries and teaching programmes across Christendom. Through them, the knowledge-base of the Christian church was increasingly consolidated, copied, disseminated and held securely in monastic libraries.²³

In the late eighth century the court of Charlemagne and his palace school under the direction of the scholar Alcuin (d.804), became a centre of education that attracted nobility and scholars from across Europe. One of these was the Benedictine monk Hrabanus Maurus (c.780–856), who subsequently continued Alcuin's work in his own school at Fulda in Germany. Hrabanus' compilation *De rerum naturis* ('On the natures of things') appears, then, in the context of a prolific expansion of curricula and texts across the christianised world, including, by this time, Isidore of Seville's *Etymologies*.

Isidore is comprehensive in his treatment of worldly things, but Hrabanus is particularly concerned with their moralised interpretations. He is one source from which we learn that *mundus* can have a number of meanings for Christian clerics at an early stage in the formation of the encyclopaedic tradition. One of St Augustine's (c. 380) seminal teachings on Christian life in the world is his analogy of life as a journey to the city of God. He draws on two key texts – 1 John 2:15–18 and Romans 1:20 – to teach the idea that the world is both temporary and delusive: 'In this mortal life we are like travellers away from our Lord: if we wish to return to the homeland

²³ Reynolds (1983) xiii–xx; Barney *et al.* (2006) 24–6.

where we can be happy we must use this world, not enjoy it, in order to discern “the invisible attributes of God”.²⁴ In the section of *De rerum naturis* that deals with ‘the world and its four regions’, Hrabanus reiterates this teaching, stressing that ‘nothing is more beautiful than the world we see with our fleshly eyes’. But *mundus* can also be understood *historialiter*, that is to say, as a constructed narrative or allegory; and as a *compactio* or ‘joining together’ of opposing elements of the universe, good and bad.²⁵ As the philosophers have said, the world is the cosmos of spheres (the elements and the planets) surrounding the earth; it is also the creation made in the first six days, and the unfolding of events set in motion by the Fall.²⁶ Far be it from us, says Hrabanus, to think that *mundus* is principally the heavens and earth and created things, which is how the word is generally used:

Do not choose the world nor the things that are in the world; if anyone chooses the world the love of the Father is not in him, since all that is in the world is desire of the flesh and desire of the eyes and pride of life, which comes not from the Father but from the world. (*De rerum naturis*, 11.1)

Here, Hrabanus refers to the first epistle of John drawn on by Augustine, reminding us that the medieval cleric (like Isidore’s circus-goer) was being called on to decide between this world and *patria*, the homeland of the father. This text would become fundamental to the medieval trope of *peregrinatio*, Christian pilgrimage in body or spirit, defining human life in the world as a series of vicissitudes and choices between alternative directions and goals.²⁷

This brings us to one of the historical characters listed by Isidore, who would become a literary embodiment of the errant mortal reflected over time in encyclopaedic texts, including maps. It is thought that the exploits of Alexander the Great (356–323 BC) became known first through Latin recensions derived from the early fourth-century *Res gestae Alexandri Magni* of Julius Valerius, and later from the eleventh-century *Alexandreis* of Gautier de Chatillon, which evidently became popular during the Middle Ages.²⁸ Because of his far-ranging travels the historical Alexander is ‘inextricably entangled with every work of geography’ and referred to in some way on every medieval map, as Evelyn Edson notes; over time he becomes a complex medieval hero: geographical mnemonic device, ambitious explorer and

²⁴ Green (1995) 13, 17.

²⁵ Hrabanus Maurus, *De rerum naturis*, 11.1 *De mundo et IIII plagis ipsius*. The Latin text is available at www.intratext.com/IXT/LAT0385/_P1.HTM (last consulted, 11/2/13). All paraphrases are the author’s unless otherwise stated. On the text and mss, see Schipper (1997) 363–78.

²⁶ Hrabanus Maurus, *De rerum naturis*, 11.1.

²⁷ Zacher (1976) 42–4. ²⁸ Kratz (1991); Bunt (1994) 6–7.

arrogant conqueror, but also typological Christ-figure and moral exemplar of the *curiosus*, subject to the 'lust of the eyes' and 'pride of life'.²⁹ We need to bear in mind the moralised view of *mundus* as set forth by Hrabanus Maurus if we are to understand something of the medieval importance of Alexander. At the same time an awareness of the Augustinian metaphor of life as a journey to the true home, and of the role of Alexander (and other legendary travellers such as Noah, the Children of Israel and Odysseus) as literary embodiments of its meaning, are essential to our understanding of medieval *imagines mundi*.

Honorius Augustodunensis' *Imago mundi*: reflections of a post-Carolingian world

Henry V became King of Germany in 1098 and Holy Roman Emperor from 1106 to his death in 1125. By this time the affairs of the church had become highly politicised across northern Europe, two particular areas of contention being the backsliding of clergy and the contest between pope and emperor over the right to invest bishops. Amid this disorder some churchmen strove to bring about reform, especially in the area of pastoral care. By the end of the eleventh century monastic *scriptoria* across Christendom were producing teaching texts of many kinds and with increasingly complex adaptations of classical and other source material, intended to strengthen the teaching of fundamental doctrine for both active and contemplative monastics.³⁰

Studies of the libraries in monastic houses of both men and women testify to the sophistication and aesthetic standards of monastic culture by this time. Taking the post-Ottonian German-speaking lands as an example, Nigel Palmer points to a 'galaxy' of twelfth-century writers and writings, the high standard and abundance of manuscripts, the growth of libraries and the evidence of teaching activity in cathedral and monastery as well as university.³¹ Religious of both sexes participated in this creative activity: compilations of knowledge added to the genre by the mid-twelfth century include Lambert of St Omer's *Liber floridus* (c. 1120), Hildegard of Bingen's *Physica* and *Causae et curae* (c. 1155), and the *Hortus deliciarum* of Herrad, abbess of Hohenbourg (died after 1196). Neil Hathaway traces the way a growing notion of *compilatio*, moving away from its pejorative Latin meaning, came to signify the scholarly gathering of the 'sweetness' of others'

²⁹ Edson (1997) 103–5, 111, 139–44. See also Ladner (1967); Reed Kline (2001) 206–18; Woodward (1987) 286–370.

³⁰ Reynolds (1983) xxxvii. ³¹ Palmer (2007) 22, 41.

writings for a useful purpose, by analogy with the work of bees.³² Names such as *hortus* and *florilegium*, used to describe devotional compilations, testify to the acceptance of figurative language and the popularity of the apian metaphor. Twelfth-century educators such as William of Conches and Hugh of St Victor had stressed the value of metaphor as a valuable teaching and memorising tool for students. Hugh moreover had stipulated the activation of all the senses in imagination, for the achievement of true meditation upon the Christian message.³³

Fiona Griffiths argues that medieval compilers need not be regarded as mere anthologists but as creative writers who applied their personalities and intellects to the tasks of shaping given material appropriately for their purpose, and making their voices heard in the debates of their day.³⁴ One such is Honorius Augustodunensis (died c.1140), compiler of *Imago mundi*, 'The Image of the World'. This writer's identity has been much debated, but Valerie Flint concludes from the presence of his works in the libraries of celibate communities actively engaged in pastoral care and preaching, that he was an ardent advocate for ecclesiastical reform, and strongly associated with the imperial city of Regensburg; the popularity and prestige of his works are evident from the number of manuscripts and new editions made during his lifetime.³⁵ Honorius pursued his career in both England and Germany, and Flint deduces that he may have dedicated his world-book first to Henry, Archdeacon of Huntingdon, and in the case of later manuscripts, to Christian, Abbot of Regensburg.³⁶ Like Isidore, Honorius conveys a conservative body of received knowledge about the world and the person within it, suitable for priests to pass on to their flocks. Although conservative in his views he is, as we shall see, evidently aware of newly available ideas about the relationship between the person and the universe, such as those transmitted to the west by John Scotus Eriugena.

The compilation forms part of a trio of works – the *Neocosmum* (or *Hexaemeron*), *Imago mundi* and *Clavis physicae* – concerned with explaining the meaning of the first four books of Genesis, elucidating the philosophy of Eriugena, and supporting priests in their pastoral work. Honorius himself lists it as *Imaginem mundi de dispositione orbis*, 'a description of the cosmos'.³⁷ *Imago mundi* expands the six chapters of the *Neocosmum* into three books and adds a dedicatory Prologue in which the compiler emphasises his reflective and instructive purpose, saying that in his 'little book . . . the disposition of the whole world can be discerned as if in a mirror':

³² Hathaway (1989). ³³ Wetherbee (1988). ³⁴ Griffiths (2007) 222–3.

³⁵ Flint (1995a) 95, 129–42. ³⁶ Flint (1983) 8–13. ³⁷ Flint (1995a) 97.

*nomenque ei Imago Mundi indatur
eo quod dispositio
totius orbis in eo
quasi in speculo conspiciatur.*³⁸

I cite here Hans Zimmermann's arrangement of the lines based on Flint's edition, since they demonstrate the contrived, musical, and possibly mnemonic effect of Honorius' rhythms and half-rhymes. Book 1 consists of 147 chapters or verses which form a self-contained, map-like description of the world. Book 2 deals with abstract matters relating in particular to measurement and time. Book 3 consists of a hexameral history of the world from the First Age (*Prima etas*) and the fall of the first angel, to the reign of Henry V (d. 1125). A late twelfth-century manuscript of the *Imago mundi* from the Cistercian monastery of Sawley contains a detailed world map now known as the Sawley map, that (although slightly later than the date of the text) complements Honorius' descriptions of the world in Books 1 and 3.³⁹ Edson concludes that Honorius uses the mutually illuminating combination of text and map to illustrate his vision of 'the world of space and time, caught up in the drama of creation, salvation, and eventual destruction'; we must consult his accounts both of world geography in Book 1 and of world history in Book 3 of the *Imago mundi* in order to read the map aright.⁴⁰

While the content of the whole is firmly orthodox, Honorius' style is highly individual, as Flint has noted.⁴¹ Following an elaborate dedication consisting of a play on the language of numbers, Honorius begins his description of the world with a flurry of analogies, as if to display his own erudition and flatter his patron: in the first verse, 'On the shape of the world' (*De forma mundi*), he states that the world is in constant motion, it is like a round pillar, it is like an egg. In the second, 'On the creation of the world' (*De creatione mundi*), he says that creation is written about in five ways, it was achieved in six days, this is the sixth age which will end in Apocalypse. In the third verse 'On the elements' (*De elementis*), he tells us that there are four elements – fire, air, water, earth – which turn into each other and back again. The elements are like ligaments of gut, which is matter, holding the world together. In the fourth, 'On the seven names of the earth' (*De vii nominibus terrae*) we learn that the earth has

³⁸ Flint (1983) 18, arranged by Hans Zimmermann (2000) *Honorius Augustodunensis Imago Mundi 1, 1–57 (Kosmographie: Erdkunde)*, available at 12koerbe.de/arche/imago.htm (last consulted 11/2/13).

³⁹ Corpus Christi College Cambridge MS 66. The map is clearly reproduced in Edson (1997) 114; Harvey (1996) 23; Scafi (2006) 142–3.

⁴⁰ Edson (1997) 115–16. ⁴¹ Flint (1983) 150–1.

seven descriptive names: *terra*, *tellus*, *humus*, *arida*, *sicca*, *solum*, *ops*, each for a good reason.⁴² Here he seems to be alluding to the world as unstable *motus* that we have seen referred to by Isidore and Hrabanus; possibly to the little-credited cosmology of the sixth-century Greek Indicopleustes; and to the contemporary neoplatonic concept of the ‘cosmic egg’ that has been explored by Peter Dronke.⁴³

In the fifth verse, ‘On the shape of the earth’ (*De forma terre*), Honorius combines rhetorical devices and literary allusions to produce a dynamic account of the earth as a material, confined space; as a divine creation within eternity; and as a living body. But in the midst of this information the perspective suddenly leaps from ground level up to an imaginary bird’s-eye view:

if anyone were to look down on the world from the sky, the whole hugeness of its mountains and deepness of its valleys would appear less than the finger of one who, travelling, held a staff in his hand.⁴⁴

The effect of the juxtaposition of ‘hugeness’, ‘deepness’, ‘finger’, ‘staff’ and ‘hand’ is a dizzying conflict of scale. To the figure looking down from the sky, earth’s mountains and valleys would appear not huge but tiny like a traveller’s finger; the figure, staff in hand, traversing the landscape thus becomes vast by comparison, his finger greater in size than the mountains. In addition the use of the word *pila* as staff, echoes the earlier image of earth’s likeness to a round pillar. This dynamic image can not only jolt the reader into closer attention, but also situate the idea of the Christian traveller over the landscape as a dominant theme within the image of the world, evoking St Augustine’s model of spiritual *peregrinatio* discussed above.

The rest of Book 1 emphasises the world’s fearful aspects and increases in dramatic impact as it progresses. Honorius starts by summarising information about the world as the three habitable zones. He treats paradise (closed to mortals and bound around by a wall of fire) and the four great rivers flowing from it. Beyond paradise are many places deserted and untrodden on account of serpents and wild beasts.⁴⁵

Then follow the world’s inhabited places and events of world history enacted in them: in the tenth verse, for example Honorius describes India as the place where Alexander the Great imprisoned the ‘extremely ferocious’

⁴² Flint (1983) 49–50, arr. Zimmermann.

⁴³ On the cosmos as pillar see Woodward (1987) 319; on neoplatonist visions of the ‘cosmic egg’ see Dronke (1974) 79–99, 154–66.

⁴⁴ Flint (1983) 49–50.

⁴⁵ On the complexity and development of medieval depictions of paradise see Scafi (2006).

Gog and Magog, and where there are pygmies and other monsters; Parthia is where the art of magic first arose. Then, after verse 35 on Sardinia comes *De inferno* on hell as a place at the centre of the world, with its fire, sulphur, ice and monsters. Next, in verses 38 to 55, come vivid descriptions of the seas and their terrors, such as whirlpools that suck in and spit out ships, volcanoes, the ice-bound Poles, poisonous waters, the Dead Sea, crocodiles and hippopotami, and finally warnings of tempest. The hair-raising sequence culminates in the fifty-seventh verse 'On portents' (*De portentis*) with a cry for rescue:

When navigating at night, if there is phosphorescence on the oar, there will be a storm; and when dolphins leap often from the waves the wind will blow in that place and when the clouds clash together the heavens will open. May we arise from the depths of the sea and hang suspended in the air *scriptoria penna*.⁴⁶

The concluding two words can scarcely be translated, since *scriptoria penna* implies both the monastic writing cell and the activity carried out there; *penna* might signify the writer's feather quill, but also the angelic wing of contemplation. The concluding prayer for deliverance seems to follow logically from the preceding focus on danger, but the final lines echo the opening words of the penitential Psalm 129, a plea for redemption which includes the words *de profundis clamavi ad te Domine* ('out of the depths I called to you, oh God'), used in the church's Office for the Dead. This first book of *Imago mundi* can be understood as more than a description of places and peoples: it is an emotive evocation of earthly sin and the fear of damnation.

Elsewhere in Book 1, Honorius uses a contrasting image to express the longing to transcend the 'horizons' of mortal nature. In a short verse 'On man', Honorius notes the way number 'ties together and naturally reconciles our parts . . . whence *homo* is called *microcosmus*, that is a lesser world'. The passage concludes with an exhortation to transcend numerical limits: 'We have passed beyond the fire through the planetary globes, now may we penetrate the heavens'.⁴⁷ This placement of *homo* in the further reaches of the cosmos, between descriptions of the music of the spheres (*De celestis musica*) and the mystery of number (*De mensura*), complements and contrasts with Honorius' earlier representations of the person with a staff moving across the landscape and drowning in the sea.

In each of the three books the human figure appears in a variety of forms and styles, abstract and concrete, expository and poetic. Book 2 contains a

⁴⁶ Flint (1983) 72, *De signis*.

⁴⁷ Flint (1983) 80, *De homine: ignem per globos planetarum transcendimus, nunc celestia penetremus*.

further description of the human body as *microcosmos* or ‘lesser world’ at one with the greater in its composition and balance of elemental qualities.⁴⁸ Here the context is that of time, the subject matter of the second book. Honorius starts with *Evum*, eternity, ‘which pertains only to God’; then follow *Tempora eterna* which pertain to angels. Lastly, in *De tempore*, he treats the times that constrict and measure out mortal lives – day lengths, latitudes, the horizon, eclipses, seasons, various cosmic cycles, and the dating of events in the church calendar by means of cosmological signs. Honorius finally explains that time is

the shadow of eternity; it begins and ends with the world . . . The life of each one of us is measured [in it]; the sequence of days and years ends [in it]; time is so called from *temperamentus*, and nothing else is understood by it than the vicissitudes of things.⁴⁹

Our own lives, then, are woven into the passage of the ages. This follows Isidore’s model of present life as part of the sequence of ages of the world, but we might also detect a literary allusion here to the classical concept of the Fates who spin our lives and cut them off – an allusion that Isidore, battling pagan beliefs, might not have wished to make. In Honorius’ very literary image of the world the person appears as part of the physical world, bound to it ‘as if by ligaments of gut’, but aspiring to pass beyond the limits of mortality.

It is arguable that in this work we see reflected something of the sophistication and richness of intellectual life in twelfth-century Germany and the political importance of patronage, as well as something of the impulse to return to basic doctrinal foundations. Honorius’ allusions to both classical and eastern cosmologies suggest a display of his own erudition and the flattering assumption of his patron’s understanding, but taken as a whole, the *Imago mundi* presents a conservative view of the world as a place of danger, and the reader as a penitent pilgrim seeking eternal life.

Clerics and laypeople in a Franciscan image of the world

The thirteenth century has been noted as the time when the compilatory tradition reached a highly developed stage, evident in *mappaemundi* and in the major productions by the Augustinian Alexander Neckam, the Dominicans Thomas of Cantimpré and Vincent of Beauvais, and the

⁴⁸ Flint (1983) 106, *De homine microcosmo: hisdem qualitatibus est humanum corpus temperatum, unde et microcosmus, id est minor mundus, appellatur.*

⁴⁹ Flint (1983) 92–3, *De tempore.*

Franciscan Bartholomew the Englishman.⁵⁰ At this time the Catholic church was encouraging the production of effective teaching materials, by, and for the use of, the Dominican and Franciscan orders of friars authorised by Pope Innocent III in 1215, as part of its campaign against heresies within Europe and the threat of pagan incursion from the east. With papal support, both orders drew on the by-then-available writings of Aristotle to develop their philosophies of nature; the Franciscans embraced neoplatonic understandings of the seen world as a cover for the unseen world of God, and especially the newly available philosophy of Pseudo-Dionysius.⁵¹ The discovery of Aristotelian logic, the needs of university teachers and students, and subsequent demands for a more precise method of defining human knowledge, led to the more accessible presentation of informational texts.⁵² Meanwhile the actuality of mission, crusade and pilgrimage gave new immediacy to the Christian ideal of *peregrinatio*, especially for the widely itinerant friars.

Bartholomew the Englishman's *De proprietatibus rerum* (c. 1240) is a Franciscan example of a compilation of knowledge intended to provide a digest of learning 'for the unskilled and lowly'. It has been suggested that Bartholomew is alluding here to the low educational level of the lay recruits sought by the order and coming under his tutelage.⁵³ St Francis had been unconventional in his attitudes to laymen and women and in his approach to poverty, but Bartholomew's stated aim is thoroughly orthodox: 'that through the likeness of bodily things we may more easily succeed in accepting the spiritual and mystical meaning in holy scripture'.⁵⁴ He observes the authority of the past, for example citing Isidore almost verbatim on the importance of number, and especially the number six, as the symbol of underlying order and meaning in creation and 'the first perfect number' according to Boethius.⁵⁵ Nevertheless Bartholomew's work differs from those of his predecessors in important ways, reflecting the conditions of his own time and the needs of his order.

Firstly, as I have argued elsewhere, Bartholomew's compilation is liberally peopled by human figures (farmworkers, miners, mariners, nurses and midwives, and more), going about their business on land and sea, evoking real life but also well-known parables, and opening the way into instructive matter highly adaptable to lay audiences.⁵⁶

⁵⁰ Reynolds (1983) xxxvii–viii.

⁵¹ French and Cunningham (1996). ⁵² Parkes (1991b) 50–6.

⁵³ Bartholomaeus Anglicus (1601) 1261; Lidaka (1997) 395.

⁵⁴ Bartholomaeus Anglicus (1601) 367: *ut per similitudinem proprietatum corporalium, intellectum spiritalem et mysticum facilius in divinis scripturis accipere valeamus.*

⁵⁵ Bartholomaeus Anglicus (1601) 1219, 1224. ⁵⁶ Keen (2007a).

Secondly, unlike Isidore and Honorius, who devote sections of their works to chronological accounts of the world's six ages, Bartholomew embeds the same historical material within a spatial account of the world's places and peoples. I have described elsewhere the way he effectively creates a discursive map of the world, comparable to the twelfth-century Sawley *mappamundi* mentioned above, and to more contemporary examples.⁵⁷ Bartholomew's textual mapping of the known world primarily describes places in terms of the historical events and characters associated with them. So, for example, in a chapter on 'Amazonia' he tells us about the Amazon women, their taming by Hercules and Achilles, and how Alexander, after demanding tribute, learnt a lesson of humility from the Amazon queen.⁵⁸ Such brief allusions to popular legend serve, as in the maps, to trace the routes and connections between real places, to bring notions of marginal races into the imagined reach of Christian mission, and to cue the reader into a network of associated stories and moral lessons. The reader can be, in a sense, a traveller within the compilation but can enter it at any point – gaining some practical information but also access to a network of images conducive to learning and remembering fundamental points of orthodox doctrine, through what Mary Carruthers calls 'intricate chains of stories, woven together in the activities of memory'.⁵⁹

Third, Bartholomew reflects mortal life as a state of being in which we are cut off from the divine world but can be aware of and reassured by it. Like Honorius, he draws a clear 'horizon' between the two worlds, but whereas the former exhorts us to aspire beyond it, Bartholomew gives a comforting account of heavenly assistance available at ground level. In his chapter on the properties of ninth-order angels he tells us that the last and ninth order of angel exists on the 'horizon' or boundary of time and eternity. These angels have 'many effects', instantaneously working within time but also transcending time. They are 'ordained singularly to our keeping': to prick our consciences, remind us of penance, guard us from fiends, reassure us in doubt, lead us in the right way, comfort us in sorrow and woe, heal our wounds, remind us not to trespass, and help us freely to serve the Lord.⁶⁰

As Ian Johnson notes in [chapter 15](#), citing A. J. Minnis, medieval readers of compilations were accorded the moral responsibility to interpret the truths embedded in the text through *lectoris arbitrium*, the exercise of the reader's own judgement.⁶¹ Bartholomew maintains throughout a

⁵⁷ Keen (2007b) 65–71. Available at eprints.anu.edu.au/titles/the-journey-of-a-book (last accessed 11/2/13).

⁵⁸ Bartholomaeus Anglicus (1601) 629. ⁵⁹ Carruthers (1998) 147–50.

⁶⁰ Bartholomaeus Anglicus (1601) 38–40. ⁶¹ Minnis (1984) 201–2.

multi-stranded discourse that interweaves exposition, description and narrative, but thanks to marginal glosses, copied along with the column text in the earliest extant manuscripts of the work, we can confirm that some readers did infer a moralising subtext woven into that discourse.⁶² So, for example, in an early manuscript now in the Bibliothèque nationale de France, at the point where Bartholomew tells us that *tabula*, a plank of wood, is useful for a drowning mariner to cling to and for making the roof of a house, the glossator's comment in the margin is 'Take note concerning the unity and strength of friends'.⁶³ The warning gloss 'Take note concerning the ups and downs of the world', occurring in the margin against information about the movements of the open sea, and others in that vein, support the view that for the friars of Bartholomew's time, preparing to minister locally and abroad, *mundus* could signify specifically the instability and dangers of far-flung secular society.⁶⁴ Whereas Honorius had expressed the longing for salvation in a highly condensed and stylised version of *De profundis*, Bartholomew gives the humblest reader a way of ruminating upon the spiritual aspects of remembered experience.

For clerical and non-clerical scholars, the friars' compilations preserved valuable sources, including newly available material from the classical world, notably the works of Aristotle.⁶⁵ Bartholomew's simple prose style and accessible Latin, along with a convenient arrangement of books and chapters, serve to entice the reader into a web of homely narrative and down-to-earth description. It may not be surprising then that *De proprietatibus rerum* contributed to further compilations as both clerical and lay patrons recast and adapted it for teaching and other purposes over the following centuries.

An encyclopaedia for laity

Possibly because the friars served as chaplains and confessors in the households of lay nobility and took their books with them, Bartholomew's compilation soon came to the notice of patrons who were neither clerical nor professional. Manuscripts testify that some lay noblemen ordered translations to be made into their own vernaculars in the fourteenth

⁶² On the extent, nature and possible function of the glosses see Meyer (1988); (2000).

⁶³ Paris, Bibliothèque nationale Ms. Lat. 60798, f197r: *Nota de societate sociorum et unitate*.

⁶⁴ Paris, Bibliothèque nationale Ms. Lat. 60798, f124v-125v: *Nota de prosperitate et adversitate mundi*. It has been suggested that these sporadic glosses, which occur only in the earliest extant mss dated to the late thirteenth century, reflect the concerns of preachers within and also outside Bartholomew's order, who by that time were making use of his work: Lidaka (1997) 401–3.

⁶⁵ For a comprehensive survey of Bartholomew's sources see Seymour (1992).

century.⁶⁶ Significantly, these vernacular translations of Bartholomew's work do not include the marginal glosses which testify to its earlier use and interpretation by clerics. Some of them do however include illuminations which add an alternative dimension to the image of the world handed down by monastic compilers. In the French manuscripts in particular, illustrations tend to privilege the human figure by placing it in an attitude not so much of pilgrimage through, or labour within, as of domination over nature, befitting the princes and wealthy bibliophiles who would own the books. As Donal Byrne has argued in relation to fourteenth-century French translations made for Charles V and his kin, Bartholomew's wide-ranging text provided an opportunity to foreground the things of nature, once known to Solomon, and now by implication to the patron, owner and reader of the book of the world.⁶⁷ Michel Salvat concludes from his study of the prologues to the French and Italian translations that in fourteenth-century Italy and France there appeared the concept of a ruler who ought to rule his subjects with '*sapience*', a mixture of divine and worldly wisdom supported by the supposed teachings of Aristotle, and that Bartholomew's work was seen as a tool for that purpose. As Salvat points out, it is perhaps not surprising that Bartholomew's work gained prestige – and an Aristotelian emphasis – in medieval Mantua, given its situation between Bologna and Padua, both sites of scientific enquiry by the end of the thirteenth century.⁶⁸ In such an intellectual atmosphere, things of the temporal world might, it seems, safely be extolled for their own sake, and celebrated in vibrant colours on the page.

The earliest of the vernacular translations of Bartholomew's compilation is the abridged Italian version of *De proprietatibus rerum* translated into the dialect of Mantua by Vivaldo Belcalzar for his patron Guido Bonacolsi, later entitled the *Trattato di scienza universale*, extant in a manuscript dating from 1309. It is included here as an early example of the way the Isidorean compilatory tradition changes and expands its readership and function in the later Middle Ages, and because its single illustrated page offers a contemporary secular view, I suggest, of the themes of divine knowledge, human spiritual aspiration and reflection common to the world-books discussed above. The manuscript starts with two alphabetical lists of authorities: the first from Augustine to 'Ugo descordes' (i.e. presumably Pedanius Dioscorides) and headed *auctores antichi*, 'ancient authors'; the second starting with Aristotle, Avicenna, Averrois and Algazel and ending with Zoroaster.⁶⁹ This second list underlines Belcalzar's aim, stated in the prologue, to put into the vernacular

⁶⁶ See Salvat (1991) 389; and Seymour (1992) 257–61 for a list of known fourteenth-century Latin and translated manuscripts of *De proprietatibus rerum*.

⁶⁷ Byrne (1978) and (1981) 152. ⁶⁸ Salvat (1991) 390.

⁶⁹ British Library MS Additional 8785, fols 5r–5v.



Fig. 1 Opening illustration for the chapter 'Del paradisi terrestri', from Vivaldo Belcalzar's abridged Italian translation of Bartholomaeus Anglicus' *De proprietatibus rerum*, 1309 (British Library ms Additional 8785, fol. 190v).

the writings of saints and philosophers in support of the doctrine of Aristotle, the platonic doctrine being 'erroneous and contrary to the faith'.⁷⁰ The text contains numerous naturalistic illustrations of topics in the illuminated capitals of separate chapters throughout the work, a small map headed *mapa del mond* at the end of the work, and one full-page illustration (Figure 1).

⁷⁰ Salvat (1991) 391.

This faces the start of the chapter *del paradis terrestri* ('on the terrestrial paradise'), which holds out the idea of the Christian pilgrim's final arrival in heaven.⁷¹ Two large male figures dominate the composition. They are both white-haired and bearded, symmetrically placed facing each other, seated on thrones, and clad in identical white, red-hemmed robes and blue cloaks. The figure on the right holds his right hand and forefinger raised as if to instruct; the one on the left holds out his right hand as if to receive, in the midst of a garden-like paradise. Above, behind and between the figures are five trees with flowery branches full of birds, and each figure has a bush at his feet containing a bird. On each side of the page are two angels, with one of each pair wielding a sword. Centrally placed below the two figures is a fountain from which water spills down a chute into four streams, two flowing off to each side and filling the bottom portion of the composition, between grey rocks.

It is not for me to interpret the iconographical details of this picture and we do not know the intentions of the artist, but we may at least make some inferences from the identical form and clothing and reciprocal gestures of the two figures in the setting of paradise. One is that it could be taken to represent Bonacolsi in an idealised garden of his own domain, as a 'king in the image of God' as Byrne suggests in relation to the French translation made for Charles V, mentioned above. Another is that it could evoke the idealised student-and-teacher relationship between Aristotle and Alexander the Great in the latter's later medieval role of exemplary seeker of wisdom, embodied in the popular compilation *Secreta secretorum*.⁷² A third literary allusion arguably implied in the illustration is St Paul's well-known sermon in 1 Corinthians 13: 9–12, ending with the promise: 'For now we see obscurely in a mirror; but then, face to face'.

This illuminated manuscript illustrates an important later medieval development in the life of the compilatory tradition. Whatever the sub-textual nuances within the illustrations, the informative body of the work remains in the translation, with Aristotle's authority brought to the fore. In the context of later medieval social and religious change and continuous warfare, we can see this appropriation of supposed Aristotelian wisdom and opportunity for aggrandising display as one of the separating strands apparent in the later stages of the tradition. Wealthy patrons in several European countries commission translations into their own vernaculars, extant today in lavish manuscripts. Meanwhile professional readers such as doctors and lawyers form another strand of readership, mining and recasting the

⁷¹ British Library MS Additional 8785, fols 190v–191r.

⁷² Williams (2003).

informational content for practical purposes. The long-lasting success of Bartholomew's work has been attributed partly to the ease with which its content could be accessed and copied in separate parts by students, physicians, lawyers and others.⁷³ We may surmise that the totality of knowledge, for these readers, was a less important aspect of an 'image of the world' compilation than the nuggets of useful information it preserved from ancient and accrued authorities. As repositories of ancient knowledge the Latin texts remain in the libraries of universities and abbeys for the continued use of scholarly readers. Neoplatonic understandings of the seen world as a cover for the unseen world of God may well remain available to clerics, but the public function of the work no longer rests upon them. In due course, the content of the tradition, refashioned and put into print, comes into fruitful collision with new thinking about the human and natural worlds, as discussed by others in this volume.

Conclusion

As the editors suggest in the introduction to this volume, we can look with hindsight upon the compilatory tradition as if upon a changing and varied landscape. We can see that, as Reynolds makes clear,⁷⁴ Isidore was the crucial gatherer of and conduit for the tradition's classical and patristic sources through the textual dearth of the seventh century; and we can see the transmission and expansion of these sources right into the seventeenth century. We can observe the contrasts in style as different compilers draw on the same source material and integrate new authorities, and see some, especially Isidore and later Bartholomew, become authorities in their own right.⁷⁵

We can also see that in spite of their contrasting styles and formats, the compilations share significant commonalities that persist over time. For example, the works examined here all give due weight to the temporal as well as the spatial dimension of the world. The human figure moves as part of a historical procession as well as a reflection of the reader in his or her present situation. Reflection is a common theme: as the mirrored self within the world, as meditation upon meaning, and as the obscure view of truth seen 'through a glass darkly'. The medieval compiler and the

⁷³ Edwards (1985). ⁷⁴ See n. 23 and n. 30, above.

⁷⁵ The accretion of material is well illustrated in a thirteenth-century manuscript containing an extract from Honorius' twelfth-century *Imago mundi* that includes an Isidorean O-T map: Scafi (2006) 162.

reader are implicated as cleric and congregation seeking salvation for the soul in spiritual, or even actual, *peregrinatio*; as 'lesser worlds' with both mundane and divine properties; and as actors in the world's past and present integral to the fulfilment of a divine plan. Such a theme itself reflects the ruminative and meditative approach required of the monastic reader, in particular, in apprehending the religious truths hidden beneath the world of created things. Vincent de Beauvais' enormous teaching compilation the *Speculum maior*, 'The Greater Mirror' (1255) appears to reflect a later medieval awareness of this metaphor.

Another persistent theme is that of boundaries. Isidore, Hrabanus, Honorius and Bartholomew are all concerned with representing the world as the totality of human knowledge known to them, as well as the whole scope of God's unfolding plan. They each find a way of doing so in the light of aesthetic and pedagogical considerations appropriate to their time. Each compiler reminds us of the physical horizon visible at ground level, but also of the impermeable boundary between the temporal and eternal worlds, earth and paradise, perdition and salvation, and between the true and the nefarious or illusory. The body of knowledge is itself bounded by canonical limits, being, until the later Middle Ages, exclusively the domain of a Latinate clerical readership. The image of the world as a bounded totality of knowledge also points to a political aspect of the tradition that can only be touched on here. As Peter Whitfield points out in relation to some later medieval *mappaemundi*, within the confines of precedent compilers can use their creative ingenuity to express wider contemporary political themes. For example, they may choose to emphasise certain features in order to aggrandise the power of the Christian church, or of a ruling dynasty, or a nation at war.⁷⁶ Our sample supports this notion. It also indicates that both clerical and secular patrons play an important part in the process of compilation, in that they support and sanction such lengthy projects. The compilers can in turn imply that their great ones are players on the world stage, and in a sense owners of the prestigious content as well as the costly material of the book.

The expansion of horizons in a literal as well as figurative sense accompanies the life of the tradition. The physical boundary of the world, the ring of Ocean, forms part of the world's divine geometry and its basis in the divine properties of number, a geometry remaining visible in world maps even as they gain complexity over the Middle Ages. As the centuries pass,

⁷⁶ Reynolds (1983); Whitfield (1994) 12, 24. For an examination of the English translation in its political context, see Keen (2007b) 86–95.

an increase in travel and the innovation of logical ordering principles in the compilation of texts enable compilers of both discursive and graphic images of the world to add more detail to their descriptions. However their basic conception of the tripartite world and its genesis remains rooted in scriptural authority. As Naomi Reed Kline notes of the Hereford map, the combination of simple geometry and complex detail conveys the salvationary 'plot', culminating in the Last Judgement, to be understood by the viewer however the map is 'read'.⁷⁷

The defining boundaries of the compilatory tradition remain a matter of enquiry. As the last example suggests, the fourteenth century brought great social and cultural changes, but it may be that from this period we can still discern the 'salvationary plot' of the compilations being enacted within public images of the world accessible to laity. The large Hereford map, possibly publicly displayed and used as an aid for preaching to a lay congregation within the cathedral, may be one such.⁷⁸ As Ian Johnson's study of Reginald Pecock in [chapter 15](#) suggests, the church was not yet willing to sanction lay access to religious knowledge through unmediated religious texts. However we might consider whether other vernacular media, such as cathedral architecture and popular drama, might also have functioned as spaces of learning in which moments of moral choice and contrasts of human conduct could be presented before an involved (and in the case of the Corpus Christi drama, actively participant) audience.⁷⁹ We can also see the moral and social dilemmas of dramatically realised characters becoming the focus of attention in the secular theatre of the following century. While we cannot assume that people of the past made a connection between the drama and the compilations, we can observe successive compilers finding new ways to figure forth an image of the world of nature and society, grounded in ancient authority, but varied according to the needs of their own time and place. While existing definitions of the 'encyclopaedia' in terms of educational function remain useful, the small sample of texts discussed indicates that their idiosyncrasies of style and voice, their literary qualities, and their potential to evolve into new forms, also need to be stressed.

⁷⁷ Reed Kline (2001). ⁷⁸ Woodward (1987) 508; Whitfield (1994) 12; Harvey (1996) 14.

⁷⁹ Von Simson (1956); Southern (1957); Medcalf (1992) 130.

Introduction

Isidore of Seville inhabited a world of words, of capacious libraries and labyrinthine encyclopaedias. His most famous composition – the *Etymologies* or *Origins* – reflects this perfectly.¹ Composed at the request of Bishop Braulio of Saragossa in the second and third decades of the seventh century, and dedicated to the Visigothic King Sisebut, the *Etymologies* is itself a monument to human enquiry and to the vast scope of creation. The reader is taken on a grand tour of civilisation, starting with an outline of the formal curriculum of the ancient classroom and ending with a helter-skelter of mundane details about the objects to be found in a Roman garden or stable. Along the way, Isidore runs through the medical and legal knowledge of the ancient Mediterranean, provides a brief chronology of the entire history of the world, and meditates at length on the many names of God. He lists the different choirs of angels and the complex offices of the church as well as the countless heresies that challenged it; he describes the animals of the known world, the features of a Roman town, plants, minerals and features of the typical house, and leads his readers on four separate tours of the known world in his discussion of nations, geographical features, provinces and cities. In so doing, Isidore created a seminal and wide-ranging survey of knowledge as it stood in the Latin west at the start of the seventh century AD.²

I am grateful to Jen Baird for her comments on earlier drafts of this paper, and to Keith Lilley and the delegates of the 'Mapping Geographies' Conference at UCLA for discussing certain aspects of this work.

¹ The two-volume Oxford Classical Texts edition of W. M. Lindsay (1911) remains standard. The translation of Barney, Lewis, Beach and Berghof (2007) is an accessible English text which has been used (with minor changes) throughout the present chapter. Oroz Reta and Marcos Casquero (1994) provide an edition with facing Spanish translation. The Budé edition of the *Etymologies* is appearing book by book, with useful apparatus, and translation into different languages. At the time of writing these comprise: Marshall (1983) [Book 2]; Reydellet (1984) [Book 9]; Gasti (2010) [Book 11]; André (1986) [Book 12]; Gasparotto (2004) [Book 13]; Spevak (2011) [Book 14]; André (1981) [Book 17]; Cantó Llorca (2007) [Book 18]; Rodríguez-Pantoja Márquez (1995) [Book 19]. See also Guillaumin and Monat (2004) [on Book 15].

² The *Etymologies* has been less well studied than it might have been, but much of the recent scholarship has been of exceptional quality. Fontaine (1959) is fundamental, Fontaine (2000)

But it is the *scriptorium*, and the intimacy of the connected acts of reading, writing and reflection that lie at the emotional heart of Isidore's work. Midway through the sixth book of the *Etymologies*, Isidore turns back from the world, and re-enters the library. After listing the constituent books of the bible, and before moving on to the festal cycles of the contemporary church, he discusses the foundation of historical libraries, and lists the great works found within them, doubtless drawing his inspiration from his own wide reading.³ He celebrates Augustine's impossible prolificacy and the extraordinary output of Origen, the prominence of Varro and the voracious reading of Jerome.⁴ But the passage reaches its climax on a far more intimate level, with a discussion of the tools of the librarian's trade – parchment, papyrus and codices, and a telling allegorical interpretation of that most pointed object, the pen-nib:

The tip [of the quill] is split in two, while its unity is preserved in the integrity of its body, I believe for the sake of mystery, in order that by the two tips may be signified the Old and New Testament, from which is pressed out the sacrament of the Word poured forth in the blood of the Passion.⁵

The intimacy of the connection between word as it is written and the Word as it is read – between ink and incarnation – was central to Isidore's understanding of the world. Isidore does not include very many straight-forward allegories within the *Etymologies* and this one is all the more telling for that scarcity. When he looked at the tool in his hand – at the means by which he responded to the world – Isidore saw a living reminder of the eternal truth of scripture.

Words, reading and writing were so central to Isidore's conception of his world that the *scriptorium* must sometimes have seemed to close in upon itself. The *Etymologies* itself did not stand alone as a reflection of the world, but was a portmanteau construction of other texts – of the *Natural History* of the Elder Pliny, the *Collection of Memorable Things* of Solinus and the *Histories* of Orosius – which were themselves compilations of previous literature.⁶ As he stated in the dedication of the volume, composed for King Sisebut:

provides a valuable historical context, and the papers collected in Fontaine (1988) are also useful. Of the recent scholarship, see esp. Amsler (1989); Ribémont (2001); del Bello (2007) and Henderson (2007a).

³ Isid., *Etym.* 6.1–8. ⁴ Isid., *Etym.* 6.5–7.

⁵ Isid., *Etym.* 6.14.3: *cuius acumen in dyade dividitur, in toto corpore unitate servata, credo propter mysterium, ut in duobus apicibus Vetus et Novum Testamentum signaretur, quibus exprimitur verbi sacramentum sanguine Passionis effusum.*

⁶ On Isidore's sources, see the helpful summary discussion in Barney *et al.* (2006) 10–17. Phillip (1912–13) provides a thorough survey of the historical and geographical sources in the *Etymologies*.

As I have promised, I have sent you the work *On the Origins of Certain Things*, compiled from my recollection of readings from antiquity and annotated in certain places as written by the pen of our ancestors.⁷

Isidore drew his inspiration from texts which were both read and remembered – the word *recordatio* could mean either, and it was common practice in late antiquity to ruminate at length over texts which had been committed to memory.⁸ Significantly, many of the works which Isidore exploited were themselves commentaries on still other texts: he drew heavily upon Cassiodorus' *Institutiones*, an annotated reading list for monks composed in the sixth century, and relied extensively upon the scholiasts Servius and Donatus, who had commented upon the works of the great classical poets. And Isidore also depended upon the scriptural commentaries of the great Christian writers whose works he so admired: Augustine, Jerome, Origen and the rest, all of whom expounded upon the holy writ. Isidore's *Etymologies*, then, was not so much a text as a palimpsest of texts, a written manifestation of the world of words read and remembered.

Given this, it is hardly surprising that Isidore was fascinated by the uncertain relationship between words and things, between the signifier and the signified, and the role of the writer in creating order and meaning across this divide. He was acutely aware that language offered a simulacrum of the world – one that could perhaps be shaped and parsed more readily than the mundane world outside the *scriptorium* window, but one which nevertheless was itself marked by a series of semiotic conventions. The point is most clearly illustrated by Isidore's distracted digressions on the different forms of language at work in the world. He notes, of course, that different societies had evolved contrasting patterns of speech after Babel, and was evidently fascinated by the social implications of this dispersal, but he was also interested in non-verbal systems of language.⁹ The first book of the *Etymologies*, for example, includes a long discussion of the hand-signals of the schoolroom, the marginal annotations of the library and the military codes of the battlefield.¹⁰ Sixteen books later, he was still at it: at the end of his discussion of the mineral wealth of the world, Isidore enumerates the ancient symbols used to represent weights and measures.¹¹

Interested as Isidore undoubtedly was in the different semiotic systems of the world, it was language, and particularly the great divine trilogy of Hebrew, Greek and Latin, which most fascinated him. In the opening

⁷ Isid., *Ep.* 6: *En tibi, sicut pollicitus sum, misi opus de origine quarundam rerum ex veteris lectionis recordatione collectum atque ita in quibusdam locis adnotatum, sicut extat conscriptum stilo maiorum.*

⁸ Barney *et al.* (2006) 413, n.10. ⁹ See esp. Isid., *Etym.* 9.1.1–3.

¹⁰ Isid., *Etym.* 1.21–7. ¹¹ Isid., *Etym.* 16.27.1–6.

chapters of the *Etymologies*, Isidore discusses the letters of the three languages, the building blocks from which all language is constructed:

The use of letters was invented for the sake of remembering things, which are bound by letters, lest they slip away into oblivion. With so great a variety of information, not everything could be learned by hearing, nor retained in the memory.¹²

For Isidore, the written word did not exist independently of human memory or understanding, but provided a means by which an individual might remember and understand the world around him. It was reading and writing, in other words, that created meanings. This provided the central epistemological conceit of Isidore's *Etymologies* – the notion that the names of things offered an important clue to the understanding of the things themselves. In his own words:

The noun (*nomen*) is so called as if it were 'denoter' (*notamen*) because by its designation it makes things known (*noscere*, past participle *notus*) to us. Indeed, unless you know its name (*nomen*), the knowledge of a thing perishes.¹³

Etymology – the examination of the origins of words – is central to Isidore's argument here, and provides the most common descriptive trope within his work as a whole. Between the etymology of 'discipline' (*disciplina*) at the start of his first book, to the discussion of the 'cauterising iron' (*cauturium*) at the very end of the last, Isidore includes several thousand different etymological asides, and on several occasions offers multiple different origins for the same word.¹⁴ In this sense, Isidore's etymological discussion of the reed-pen (*calamus*) is more typical of his method than the allegorical interpretation of the pen-nib discussed above:

The reed-pen (*calamus*) is so called because it places liquid, whence among sailors 'to place' is *calare*. A quill (*pinna*) is so called from 'hanging' (*pendere*), that is flying, for it comes, as we have said, from birds.¹⁵

There are innumerable etymologies throughout the text, based upon ingenious constructions, imaginative associations or (most commonly) Isidore's own judicious borrowing from his sources. Viewed *en masse*, these

¹² Isid., *Etym.* 1.3.2: *Vsus litterarum repertus propter memoriam rerum. Nam ne oblivione fugiant, litteris alligantur. In tanta enim rerum varietate nec disci audiendo poterant omnia, nec memoria contineri.*

¹³ Isid., *Etym.* 1.7.1: *Nomen dictum quasi notamen, quod nobis vocabulo suo res notas efficiat. Nisi enim nomen scieris, cognitio rerum perit.*

¹⁴ Isid., *Etym.* 1.1.1; 20.16.8.

¹⁵ Isid., *Etym.* 6.14.4–5: *Dictus autem calamus quod liquorem ponat. Vnde et apud nautas calare ponere dicitur. Pinna autem a pendendo vocata, id est volando. Est enim, ut diximus, avium.*

etymologies seem to comprise a vast, and extraordinarily wide-ranging lexicon, which combines erudite (and often far-fetched) linguistic discussion with an impressive breadth of factual material. This impression is encouraged by the more or less familiar categories into which this information is gathered. When Isidore systematically lists and parses the names of the world's land animals, sea creatures and birds, its rivers, provinces, minerals and plants, the impression of comprehensiveness is convincing. To frame the enquiry in terms more familiar from the Enlightenment, the *Etymologies* not only provides its reader with a translation of the Book of Nature, it provides a running commentary upon the grammar of the book, using the familiar tools of the classical tradition.

The vast majority of recent scholarship devoted to Isidore has focused upon his epistemological method, and particularly his interest in language. In many ways, of course, this is not surprising. Various stimulating studies have traced his etymological practice back to the intellectual disputes of Hellenistic and Roman Stoicism, through Judaeo-Christian and patristic onomastics and forward to post-Saussurean (and even Freudian) anxieties about language.¹⁶ At their best, these discussions have highlighted the conceptual foundations of Isidore's method, and have systematically challenged common assumptions about early medieval irrationality or irrelevance. Indeed, in many of these more recent studies, Isidore emerges as something of a champion for intellectual activity in the first millennium.

Studies of Isidore as a simple compiler of knowledge – as an 'encyclopaedist', to adopt a rather anachronistic term – have been rather rarer.¹⁷ While no synthetic history of western encyclopaedism would be complete without reference to Isidore, he is rarely treated as more than a single staging post in a long teleology from the classical past to the early modern period.¹⁸ This, too, is comprehensible enough. While the great classical and medieval compilers – writers like Pliny, Cassiodorus and Martianus Capella, as well as Isidore – have long been plundered as valuable repositories of information about the worlds in which they lived, it is only relatively recently that they have been appreciated as authors of coherent texts.¹⁹ This change has had a revolutionary effect upon the understanding of many of these writers – as chapters elsewhere in this volume demonstrate – but Isidore has been

¹⁶ See esp. Amsler (1989) and del Bello (2007).

¹⁷ Cf. the comments of Jacques Fontaine in Ribémont (2001) ii.

¹⁸ See, for example, the dense scatter of references to Isidore in Binkley (1997). On the problems of identifying a medieval 'encyclopaedic' genre (or otherwise), see the papers by Ribémont and Fowler in the same volume.

¹⁹ The spate of recent research on Pliny demonstrates this particularly clearly: see esp. Beagon (1992), Murphy (2004), Doody (2001), Doody (2009).

somewhat neglected in this sense.²⁰ While textual studies of the *Etymologies* do exist, the simple fact remains that Isidore's startling linguistic methodology has rather distracted from his wider ambitions to bring together a vast body of disparate material within a single literary composition. But it was as a compiler and organiser of information that Isidore was read in the centuries that followed his death, and not simply as a linguistic impresario. It is only by looking at the content and the form together that many of the more intriguing aspects of Isidore's work may be identified.²¹

The present chapter seeks to provide some small illumination upon the *Etymologies* by attempting to do precisely this. The first section discusses Isidore's grammatical methodology, and necessarily draws heavily upon the important recent scholarship in this field. It notes the origins of this enquiry, and its shortcomings, many of which Isidore evidently recognised. The second section highlights the peculiar structuring principles that lay behind the organisation of the *Etymologies*, a point which has rarely been addressed in modern commentary on the work. It notes that, while no single consistent structure may be identified, Isidore employed a number of complementary strategies for the effective presentation of his material. These were intended to provide a memorable context for individual points of information, but to be suitably fluid to encourage – even demand – the creation of new patterns of order across the text as a whole. It is argued that both the content and the form of the *Etymologies* reveal a form of knowledge production based in equal parts upon reading, writing and rumination – on Isidore's part, and on the part of his audience. Isidore constructed a text that could be easily assimilated and committed to memory, and readily related both to itself, and to the vast body of literature upon which he drew. The result may frequently look baffling to a modern audience, brought up on the taxonomies of the Enlightenment, but represents an extraordinary manifestation of early medieval heuristics.

Etymology: on words and things

Isidore's definition of *etymologia* provides the obvious starting point for the analysis of his distinctive methodology:

Etymologia is the origin of words, when the force (*vis*) of a verb or noun is inferred through interpretation. Aristotle called this *symbolon* and Cicero *adnotatio*

²⁰ Fontaine (1959), however, provides a wide-ranging survey of Isidore the encyclopaedist.

²¹ Cf. Amsler (1989) 147–9.

(symbolisation) because by presenting their model it makes known (*notus*) the names and words for things. For example, *flumen* ('river') is so-called from *fluendum* ('flowing') because it has grown by flowing. The knowledge of a word's etymology often has an indispensable usefulness for interpreting the word, for when you have seen whence a word has originated, you understand its force more quickly. Indeed, one's insight into anything is clearer when its etymology is known.²²

Isidore's references to Aristotle and Cicero are taken from Quintilian's first-century *Institutio oratoria*, but the subsequent explication echoes the thinking of Boethius, whose work Isidore probably knew only through Cassiodorus.²³ Despite these debts, the passage outlines Isidore's underlying conviction in the value of etymology rather neatly: he saw the technique as a strategy to uncover the deeper significance (*vis*) of words, and hence as a means to understand better the world that they represent. Isidore articulates more or less the same argument in his further discussions of the importance of etymology in his introduction to Book 13, and in the opening paragraph of Book 10.²⁴ In all of these explications of method, he argued that the full understanding of the names of things could accelerate the appreciation of the things themselves. On the most straightforward level, then, Isidore clearly felt that a detailed knowledge of language could be invaluable to the understanding of the world as a whole.

Yet things are rarely straightforward within the *Etymologies*, and the methodology itself lies at the heart of this uncertainty. The etymological exploration of language had been widespread in the classical world, and remained so into late antiquity, but almost every aspect of it was controversial.²⁵ Rhetors and grammarians argued over whether etymology should be viewed primarily as a didactic practice or as a metaphysical one: they discussed whether the value of the detailed examination of words was to uncover mystical truths about the nature of the world, or simply to prompt slow students into closer engagement with their texts. Others fretted over the truth-claims of proposed etymologies, or how the almost infinite number of possible solutions to a word's origins might be distinguished

²² Isid., *Etym.* 1.29.1–2: *Etymologia est origo vocabulorum, cum vis verbi vel nominis per interpretationem colligitur. Hanc Aristoteles σύμβολον, Cicero adnotationem nominavit, quia nomina et verba rerum nota fecit exemplo posito; utputa 'flumen'; quid fluendo crevit, a fluendo dictum. Cuius cognitio saepe usum necessarium habet in interpretatione sua. Nam dum videris unde ortum est nomen, citius vim eius intellegis. Omnis enim rei inspectio etymologia cognita planior est.*

²³ On this passage and its influences, compare Amsler (1989) 138–47; del Bello (2007) 104–9; Ribémont (2001) 45–59; Fontaine (1978) 114–21.

²⁴ Isid., *Etym.* 13. preface; 10.1. ²⁵ del Bello (2007) provides a stimulating overview.

from one another.²⁶ With this in mind, grammarians put forward specific programmes for detailed etymological analysis, not unlike the formalised systems which the church fathers would later champion for the exegesis of scripture.²⁷ But these approaches remained controversial. While even the strictest sceptics acknowledged that etymology might serve *some* purpose when used with care in the classroom, discussion of the history of language was always a controversial issue within the classical and late antique world.²⁸

Famously, Plato's *Cratylus* expounded the different positions that might be taken in the discussion of proper names, and thereby provided a paradigm for scholars interested in the deeper truths of language.²⁹ This dialogue debated whether an individual's name could provide clues to his character, or reflected little more than the social conventions of the society in which he lived. Isidore is unlikely to have been directly familiar with the *Cratylus*, but he would certainly have encountered the similar debates which took place over the status of Stoic etymologising during the first three centuries BC. These are known to us, (and were probably known to Isidore) through the writing of Varro, and particularly through the criticisms of that writer by Cicero and Quintilian. Varro's *De lingua Latina* is only partially extant, and the sections directly related to etymology are now lost. It is clear from those passages which remain, however, that Varro's principal motivation was metaphysical: he sought to uncover the true 'spirit' of a word – or *pneuma* – through dedicated technical analysis of changes in word-form over time.³⁰ While Varro's mystic antiquarianism was shared by many of his contemporaries, this was a position which Cicero openly mocked, and which Quintilian seems to have viewed with some suspicion.³¹

Etymological enquiry was not a disinterested intellectual exercise for any of these writers, and was heavily imbued with a moral, and even political significance. Whether mystical or otherwise, the discussion of the origins of language promised a privileged access to the construction of specific texts, or to the foundations of society itself. Consequently, etymology was not a tool which could be treated lightly. Varro's elaboration of the techniques for etymological enquiry immediately underscored the expertise necessary for discussion of this kind. Cicero, too, stressed the dangers of inaccurate

²⁶ Amsler (1989) 15–19.

²⁷ On the different systematic approaches to etymology in antiquity (which have been variously interpreted), compare Klinck (1970) 45–70; Fontaine (1978) 127–9; Amsler (1989) 23; del Bello (2007) 45, 75.

²⁸ See, most obviously, Quint. *Inst.* 1.6.31.

²⁹ For discussion, see esp. del Bello (2007) 51–66 (and the references therein).

³⁰ On Varro and his later reception, compare Amsler (1989) 25–31; del Bello (2007) 81–95.

³¹ Del Bello (2007) 77–9.

or speculative etymologising, and Quintilian argued that the discussion of word origins should only be resorted to in certain circumstances, and should remain the preserve of the master for the privileged elucidation of a text, rather than a strategy for general interpretation.³²

As a Christian writer, of course, Isidore was the direct heir to a second tradition of linguistic scholarship. The centrality of scripture and the obvious importance of the written word within Jewish and Christian discourse placed a particular emphasis upon linguistic understanding. An increased confidence in the revealed truth of the bible encouraged a close analysis of the text itself, and particularly of the proper names of the Old Testament.³³ This interest was manifested particularly clearly in the work of Philo of Alexandria on the names of the patriarchs, and in Jerome's wide-ranging studies of the names and toponyms of both testaments.³⁴ In many ways, the issues raised by these analyses were analogous to those already discussed in the *Cratylus*, and Jerome was content to present his etymological enquiries as an aid to understanding the scriptures, rather than as a definitive reading of them.³⁵

Isidore punctuates his discussion of spiritual subjects with a number of short digressions on the value and potential of careful etymologising. Here, as might be expected, his ideas are heavily indebted to the writing of Jerome:

The etymologies of certain patriarchs ought to be noted, so that we may know what is reflected in their names, for many of them took their names from specific causes.³⁶

The etymologies of the names of certain prophets should be remarked for their names well display what they foretold about future things by their deeds and words.³⁷

Apostle (*apostolus*) means 'one who is sent', for the name indicates this. Just as in Greek *aggelos* means messenger (*nuntius*) in Latin, so 'one who is sent' is called an 'apostle' in Greek, for Christ sent them to spread the gospel through the whole world, so that certain ones would penetrate Persia and India teaching the nations and working great and incredible miracles in the name of Christ, in order that, from those collaborating signs and prodigies, people might believe in what the Apostles

³² Quint., *Inst.* 1.6.38; cf. Amsler (1989) 15–19, 39–41. ³³ Amsler (1989) 82–99.

³⁴ Philo, *De mutatione nominum*; Jerome, *Liber interpretationis hebraicorum nominum*. For discussion, compare Amsler (1989) 82–5 and del Bello (2007) 67–71.

³⁵ Amsler (1989) 108–11.

³⁶ Isid., *Etym.* 7.7.1: *Quorundam patriarcharum etymologiae notandae sunt, ut sciamus quid in suo vocabulo resonant. Nam plerique eorum ex causis propriis nomina acceperunt.*

³⁷ Isid., *Etym.* 7.8.3: *Quorundam autem prophetarum etymologiae nominum adnotandae sunt. Vocabula enim eorum satis ostendunt quid in futuris factis dictisque suis praenuntiassent.*

were seeing and had seen. Most of them received the rationale of their names from these activities.³⁸

In these sections, and in the discussion of the place-names of scripture, Isidore allows himself relatively full rein in his etymological argument. Here, the reader is simultaneously presented with the *dramatis personae* of the scriptures, instructed in the correct interpretation of their names, and confronted with the implication that names – and words – hold deeper truths for the understanding of the world.³⁹ This positivism was not shared by all Christian writers, however. Augustine remained ambivalent about the value of etymology for scriptural understanding. While he occasionally used etymological argument in *De civitate Dei* and *De doctrina Christiana*, Augustine was particularly sensitive to the strongly subjective aspects of this kind of enquiry and was sceptical that any deeper truths might be uncovered in this way.⁴⁰

The etymology of scripture also posed further problems for the Christian scholar. As the author of the Latin Vulgate, and as a linguist of some accomplishment, Jerome was unusually well-positioned to undertake etymological analysis of this kind. He had, after all, a confident grasp of Hebrew, Greek and Latin and moved between the languages easily enough. The same was emphatically not true of many of the scholars who came after him, and anxieties surrounding the study of the scriptures in translation are apparent in a great deal of western exegesis. Augustine, who was certainly more competent in Latin than he was in the scriptural languages, encouraged his audience to develop their facility in each of the three sacred languages as a means to improve scriptural understanding, but the issue of translation naturally remained an obstacle to the detailed analysis of the scriptures for Latin monoglots.⁴¹

With little Greek and less Hebrew, Isidore could provide only a limited discussion of the interdependence of the three sacred languages. But what he lacked in technical aptitude, he more than made up for in application. Isidore's most important contribution to this Christian intellectual tradition

³⁸ Isid. *Etym.* 7.9.1: *Apostoli missi interpretantur. Hoc enim eorum nomen indicat. Nam sicut Graece aggeli, Latine nuntii vocantur, ita Graece Apostoli, Latine missi appellantur. Ipsos enim misit Christus evangelizare per universum mundum, ita ut quidam Persas Indosque penetrarent docentes gentes, et facientes in nomine Christi magna et incredibilia miracula, ut adstantibus signis et prodigiis crederetur illis in his quae dicebant et viderant. Habent autem plerique ex his causas suorum vocabulorum.*

³⁹ Amsler (1989) 162–3; Ribémont (2001) 58–71.

⁴⁰ On Augustinian etymology, see esp. Amsler (1989) 44–56 and 100–8.

⁴¹ Aug., *De doc. Christ.* 2.11. Ribémont (2001) 68–9 provides a succinct summary of the origins and importance of the notion of the three sacred languages.

came through the ambitious breadth of his project, rather than through the formal introduction of any new ideas about language. Read from beginning to end, or indeed opened at random in the middle, the *Etymologies* can seem like a relentless application of a single methodology, and he certainly stuck to his task with diligence. The central importance of language and names to Isidore's understanding of the world can hardly be missed.

Yet Isidore never implied that there was only one route through this linguistic labyrinth. He certainly retained the conviction of Philo and Jerome that certain words contained a kernel of truth that might aid the faithful in their contemplation of divine creation: to this end he devoted particular attention to the proper names and toponyms of scripture, and discussed at length the deeper significance of the trinity of Hebrew, Greek and Latin tongues. But Isidore was equally aware that other words held no such spiritual meaning, and could also be derived from their historical origins, their place in the world or from the whims (and varied tongues) of humanity.⁴² Such words still found a place in his vast *Etymologies*. No less significantly, there are large sections of the text which include no etymologies at all. Here, Isidore contented himself with discussions of aetiologies, of asides of historical or natural-historical interest, where linguistic analysis was deemed irrelevant. In this sense, Isidore was an inheritor of a classical tradition of education, in which etymology could aid discussion and understanding in the classroom. His application of this particular pedagogical method was perhaps rather more enthusiastic than many of his predecessors would have thought necessary, and would have been a particular puzzle to Quintilian and Augustine, but it was not applied completely thoughtlessly, and was familiar enough in form, if not in scope.

Ordering the world: the structure(s) of the *Etymologies*

Haphazard as it may seem, Isidore's peculiar concoction of etymology, aetiology and encyclopaedism clearly worked. The *Etymologies* circulated extraordinarily widely, and became a standard work within decades of its

⁴² The *locus classicus* is Isid., *Etym.* 1.29.5. Cf. also 13.1.1–2, where Isidore explicitly distinguishes Adam's mystic Hebrew and Greek/Latin derivations from other languages, and 9.2.38 and 132, in which he discusses the varied origins of ethnic terminology. Of recent studies, Amsler (1989) prefers to regard Isidore's approach as a consistent etymological discourse, (with a handful of regrettable anomalies). This seems to understate the flexibility of his approach. Similarly, I would dispute Ribémont (2001) 52 who is anxious that the presence of 'barbarian' etymologies within the text places Isidore's whole enterprise in peril.

publication.⁴³ Bede and Hrabanus Maurus were to develop the image of the natural world that Isidore had articulated, and his work provided the model for the great medieval compendia of knowledge down to the twelfth century.⁴⁴ A variety of readers explored and absorbed the text, and incorporated Isidore's observations into their own compositions. Isidore's wide learning was recast into new forms, and the great Spanish polymath rapidly became a crucial conduit for the transmission of information from a variety of classical and patristic texts. But it was not Isidore's etymological ingenuity which won him such a wide audience in the centuries that followed. Although Isidore helped foster a subgenre of lexical and linguistic reflection, most of the readers of the *Etymologies* were inspired by the ecumenical breadth of the work, and by its staggering accretion of detail, rather than by its ingenious wordplay. Isidore's principal value rested on his representation of the created world in terms which made sense to his audience. Appreciation of the *Etymologies* thus demands an assessment of the overlapping systems by which this information was presented and rendered comprehensible to its diverse audiences.

It is Bishop Braulio of Saragossa, rather than Isidore himself, who provides modern readers with the clearest sense of the ambitions, scope and power of the *Etymologies*. Braulio was a protégé of Isidore, and if the *topoi* of the extant correspondence between the two churchmen are to be trusted, it was his repeated pestering which finally prompted the bishop to circulate his long-gestated work. In several letters of the early 630s, Braulio requested a copy of the *Etymologies* 'copied out in full, corrected and well-organised', and was finally successful.⁴⁵ When he came to compile a laudatory bibliography of Isidore's writings after the elder bishop's death, it was this great text which provided the climax to the list:

The *Etymologies*, a codex of enormous size, divided by him into topics, not books. Although he left it unfinished, I divided it into twenty books, since he wrote the work at my request. Whoever thoughtfully and thoroughly reads this work, which is suited to philosophy in every respect, will not be ignorant of the knowledge of human and divine matters, and deservedly so. Over-flowing with eloquence of various arts with regard to nearly every point of them that ought to be known, it collects them in a summarised form.⁴⁶

⁴³ Barney *et al.* (2006) 24–6 provide a concise discussion (with further references).

⁴⁴ Ribémont (2001) provides a succinct summary of Isidore's colossal influence.

⁴⁵ Isid., *Ep.* 4: *transcriptos, integros, emendatos et bene captatos*.

⁴⁶ Braulio, *Renot* 39–40: *Etymologiarum codicem nimiae magnitudinis, distinctum ab eo titulis non libris, quem quia rogatu meo fecit, quamuis imperfectum ipse reliquerit, ego in uiginti libros diuisi; quod opus omnimodo philosophiae conueniens quisquis crebra meditatione perlegerit, non ignotus*

It may have been Braulio who first entitled Isidore's great work the *Etymologies*, but beyond this he seems oddly unmoved by the linguistic ingenuity of the text.⁴⁷ Instead, it is the breadth of Isidore's enquiry which most struck Braulio, and its importance as a complete (or almost complete) summary of human and divine knowledge.

Braulio also clearly recognised the importance of structure to a work of this kind. Apparently Isidore had refused his specific request to provide a clear layout for the text while he was still alive, and so his editor undertook this task on his behalf. Braulio's division of the *Etymologies* into books was not definitive – manuscripts differ both in the number of books included and in the points at which they start and finish – but the fact remains that some form of conceptual organisation was necessary to the comprehension of the text.⁴⁸ It was only by presenting information in some form of order that the reader could begin to penetrate the vast body of information presented within the *Etymologies*. It is crucial to recognise, however, that there was not only one way 'in' to the work, and that its primary function was not to aid the individual searching for a single discrete point of information.

As will be discussed, it is unlikely that Isidore ever intended his work to be employed only as a reference text in the modern sense – to be pulled down from the shelf to settle an obscure point or clarify a difficult word. The modern apparatus criticus and simple index, which allow the reader of W. M. Lindsay's edition (or the translation of Barney, Lewis, Beach and Berghof), to zip effortlessly to the relevant entries on (say) homeopathy, Homer or homicide, would not only have been incomprehensible to Isidore, they would have been irrelevant. Isidore did not compose his work as a collection of discrete factoids, to be accessed from the back, but rather created it as a series of overlapping reflections on the world, intended to be comprehensible in themselves, and readily committed to the memories of those reading them.⁴⁹

Close investigation of the text that has come down to us provides some sense of the vertiginous overlapping systems of reference and cross-reference

diuinarum humanarumque rerum scientia merito erit, ibi redundans diuersarum artium elegantia ubi quaecumque fere sciri debentur restricta collegit. [Some MSS give the number of Braulio's books as fifteen].

⁴⁷ The text is so entitled in *Isid.* *Epp.* 2, 4 and 5, and as *Origines* in *Epp.* 4 and 6. On the title, see Ribémont (2001) 39, n.2.

⁴⁸ Henderson (2007b) 154–65.

⁴⁹ Henderson (2007a) 2–9 and *passim* discusses the need to clear away the 'para-textual ring fencing' in order to appreciate the *Etymologies*. In reading the text as a single (albeit complex) narrative, however, Henderson perhaps overstates the coherence of the work as a whole, and certainly obscures the advantages of Isidore's idiosyncratic taxonomies.

that the writer built into his text. The first point to make is that it is clearly futile to search for any single organising principle within the *Etymologies*. The detailed reading of any particular section of the text results in certain structural patterns popping suddenly into focus, and then falling away just as quickly. This may be illustrated easily enough by looking briefly at Book 15 of Lindsay's edition – a section labelled 'On Buildings and Fields' in several manuscript traditions.⁵⁰ Outlined simply, this book includes a short discussion of four paradigmatic cities and their origins: Rome (for obvious reasons); Enoch (the first city of the bible); Babylon (the location of Babel and site of the division of languages) and Jerusalem (again, for obvious reasons).⁵¹ The remainder of this chapter provides a long discussion of the different cities of the world, and traditions of their foundation, from Nysa in India to Cyrene in Libya. The central section of the book then considers the typical features of ancient cities as Isidore understood them, treating different types of urban foundation, fortifications, public buildings, markets, domestic habitations, religious structures, storehouses and workshops, in that order.⁵² Isidore then discusses features of individual buildings from entrances and decorative items to water pipes and walls, and notes certain specific structures, including tents and tombs.⁵³ The final section of the book describes rural buildings, fields and their boundaries and roads. Each entry is glossed with a nugget of historical, linguistic or social information, as is the case throughout the *Etymologies*.⁵⁴

Like the *Etymologies* as a whole, Book 15 does not lack structure; if anything it is overly burdened with different possible patterns of meaning, and even a cursory summary of the chapter contents illustrates this. In the opening section, for example, we see a transformation from specifics into generalities – from historical places to urban spaces. Equally, the first half of the book could be read as a sharpening focus, from the world to its cities, to their streets and houses to the tour of specific rooms. The section on apertures guides the reader from the street into the interior, just as the chapter on extra-mural tombs ushers the reader from town into the country.⁵⁵ And Book 15 is entirely typical of the *Etymologies* in this multiplicity of narrative and non-narrative meanings. In fact, almost all of the text could be read in this way as a display of different overlapping (and occasionally contradictory) structural principles.

⁵⁰ *De aedificiis et agris*. Guillaumin and Monat (2004) provide a useful discussion of the book.

⁵¹ Isid., *Etym.* 15.1.1–5. ⁵² Isid., *Etym.* 15.2–6.

⁵³ Isid., *Etym.* 15.7–11. ⁵⁴ Isid., *Etym.* 15.12–16.

⁵⁵ For further readings of the same section, compare Henderson (2007) 174–80.

When the *Etymologies* is viewed as a whole, however, certain broader organisational patterns do become evident. We see, for example, patterns in the arrangement of knowledge in the first five books (the classical curriculum), in those related to the church and its critics in Books 7–8, (broadly hierarchical), and to the human body in Book 11 (largely physiological). What is most striking about these patterns, though, is the remarkable *inconsistency* between them: while individual sections have an internal logic of their own, the reader would be hard-pressed to identify a single pattern to the structure of the *Etymologies* across its twenty books: one recent study has demonstrated this point quite clearly.⁵⁶ But these clumsily tessellating systems are central to the understanding of the *Etymologies*, and a short discussion of a handful of the taxonomies that Isidore employed helps to explain why his method proved to be so popular.

Order in the curriculum

The first five books of the *Etymologies* are broadly structured around the curriculum of the Roman classroom.⁵⁷ The three foundational subjects of the *trivium* – grammar, rhetoric and dialectic – dominate the first two books, which essentially take the form of a straightforward primer in these didactic approaches to language. These chapters are evidently not for the beginner – it would be a bold autodidact who plunged into Isidore's discussions of metaplasms or prosopopoeia without some preliminary grounding in rhetorical training – but they are relatively wide-ranging and thorough. As ever, it is not difficult to trace the primary influences behind this section of the text. Cassiodorus' *Institutiones* were certainly central; through him the residual traces of Augustine, Boethius and Pompeius can also be detected, and further back the influence of Celsus and Varro may also be assumed. But it was clearly Isidore's own decision to open his *Etymologies* with a survey of the foundations of late classical education.⁵⁸ In this, Isidore established the importance of grammar to the vast encyclopaedic project which follows, but he also situated his work within a lineage of essentially

⁵⁶ Henderson (2007a) makes a spirited attempt at giving a single narrative 'shape' to the whole of the text, and casts much light on the ordering of the *Etymologies* as a whole. Yet even this reading encounters difficulties with the sudden interpolation of the alphabetic scheme in Book 10, and pays little attention to the recurrent use of geography, political hierarchy and moral judgement as ordering motifs throughout the text.

⁵⁷ On the foundations laid in this section, compare Marshall (1983); del Bello (2007) 96–7; Henderson (2007a) 27–49; and esp. Codoñer (1991).

⁵⁸ On Isidore's influences in these chapters, see Fontaine (1966) 523–6 and Codoñer (1991) 23–7.

textual commentaries upon the world. Isidore's was to be a text about texts, organised along familiar verbal lines; his audience is immediately provided with a map for the navigation of his opening section.

Much the same can be said of the classical *quadrivium* which provides the structure of Book 3.⁵⁹ These four mathematical disciplines of arithmetic, geometry, astrology and music were regarded as a supplemental curriculum to linguistic training and were collected together with the latter as the seven liberal *artes* by a variety of late antique scholars, including Martianus Capella, (who arranged a whole encyclopaedic text upon this sevenfold division), Augustine and Cassiodorus.⁶⁰ In *Etymologies* 3, Isidore treats each of these subjects separately in a short section, and once again his tone is didactic and technical, rather than etymological. The reader is introduced to the importance and forms of numbers, as well as to different sequences, to the forms of geometrical figures and the relations between harmony, melody and rhythm, and to the structure of the heavens. Some historical context is provided by the discussion of the origins of different mathematical sciences, but this is aetiological, rather than etymological.⁶¹ Indeed, the only sustained etymological discussion within the book comes with the long discussion of the names of the planets and constellations at 3.71, at its very end. Again, it seems clear that Isidore was more concerned with sketching the outline of the *quadrivium* than with providing detailed etymologies of its component parts.

Books 4 and 5 also cover relatively well-trodden pedagogical ground in discussing medicine and legal matters respectively. While neither of these chapters approaches anything like the depth of coverage of the technical handbooks produced on these subjects in late antiquity, Isidore did draw upon specialist texts of this kind.⁶² He was also at pains to lay out this material clearly, through the adoption of a consistent structure across the two books. The chapter on medicine first provides the historical origins of the discipline (thus following a pattern laid down in the preceding book on mathematics), and then discusses humours, diseases and medications, before noting that the good physician needs to be equally adept in all of the liberal *artes*.⁶³ The discussion of the law again opens with its earliest

⁵⁹ This book is brilliantly dissected by Henderson (2007a) 50–65.

⁶⁰ Fontaine (1959) 341–51. ⁶¹ Isid., *Etym.* 3.2, 10, 15, 25.

⁶² See esp. Sharpe (1964). On the rhetorical practices governing the production and use of this type of text in late antiquity, see Formisano in chapter 9.

⁶³ Note the implicit parallel here to Vitruvius, *De arch.* 1.1.3 on the importance to the ideal architect of a broad education, and the discussion by Formisano, pp. 202–3.

practitioners, and rapidly runs through different types of law, legal issues with property and forms of punishment. In each book, Isidore is relatively sparing in his etymological asides. His sections on crime and punishment are generously coloured by discussion of this kind, but the different types of law are expounded soberly, without any extraneous etymologies.⁶⁴ Famously, the last part of Book 5 is concerned with the different methods of calculating time within the classical world, and closes with a short chronicle of the six ages of man, on the Augustinian model.⁶⁵ This rapid summary of human history provides a clear conclusion to the opening quarter of the *Etymologies*, and marks the end of the first of Isidore's structural systems. In Books 1–5, Isidore arranges his information along formal, didactic lines, and subordinates the whole of his descriptive methodology – even including the etymological digressions which gave his book its name – to this structure. But this was not a system which could be applied throughout the work.

Order in the wider world

A rather different structural system is apparent in Isidore's discussion of the peoples, provinces and cities of the world. Unlike the linguistic and mathematical sciences, geography was not considered as a central part of the classical educational curriculum, and indeed did not earn its own place in the European classroom until the nineteenth century.⁶⁶ Consequently, Isidore's treatment of the human and political geography of the world is not treated as a single coherent block, but is scattered across several books – the different peoples of the world are listed in Book 9, provinces in Book 14 and cities in Book 15.⁶⁷ Isidore also runs through the principal features of physical geography – lakes, rivers, isthmuses and so on – in Book 13. Each of these books clearly has its own internal structure; the organising principles behind Book 15 have already been noted briefly, and Marc Reydellet's studies have highlighted the themes which bind the human geography of 9.2 to the detailed description of family relationships elsewhere in the same section of the *Etymologies*.⁶⁸

⁶⁴ Isid., *Etym.* 5.4–18. ⁶⁵ Isid., *Etym.* 5.38–9.

⁶⁶ On the uneasy position of geography in the classical and medieval curriculum, see esp. Clarke (1999a) and Lozovsky (2000).

⁶⁷ On Isidore's geography see esp. Philipp (1912–13); Uhden (1935); and Merrills (forthcoming).

⁶⁸ Reydellet (1984) and Reydellet (1986).

Upon close investigation, however, it is clear that Isidore regarded his different geographical digressions as a group, and was at pains to organise each along similar lines. The list of peoples in Book 9, the provinces and regions of Book 14 and the cities of Book 15 are all arranged according to a geographical pattern.⁶⁹ Strikingly, the same pattern is also followed in the description of the world's rivers at 13.21. Each of these accounts covers the ancient world continent by continent, first describing Asia, then Europe and finally Africa. These continental geographies are also organised consistently: the accounts of Asian regions, peoples and cities all start in India and progress westward as far as the Holy Land and Egypt. They then return to the east and discuss the northern regions of Asia in a second westward itinerary. The geography of Europe is also covered in two westerly transects, first covering the northern regions from Scythia across the Danube and Rhine frontiers, and then the south from Greece through the Balkans and Italy to Gaul and Spain. Finally, Isidore describes Africa in the same terms, first relating the geography of the coastal regions from west to east, and then the interior from east to west. With some minor exceptions, this broad itinerary is maintained across Isidore's 'geographical' chapters.

There can be little doubt that Isidore was inspired in this ordering strategy by the provincial geography that opens Orosius' early fifth-century *Seven Books of History Against the Pagans*.⁷⁰ Orosius adopted an identical itinerary in his own discussion of the known world, and Isidore was clearly heavily indebted to the earlier writer in composing the provincial geography of Book 14. Yet the sources from which Isidore derived his information on the peoples, rivers and cities of the world – chiefly Solinus, Jerome and the scholiasts – were not so structured, and the encyclopaedist evidently took considerable pains to ensure that each of his digressions was arranged according to a consistent geographical pattern.⁷¹ This 'palimpsest geography' had a number of implications. On the one hand, it allowed Isidore's readers to navigate with little difficulty within specific chapters, once the order had been learned. On the other, the layered representation of the world also substantially aided the effortless movement between different books: a reader confronted with Isidore's discussion of the splendours of India in Book 14, for example, would immediately recall the discussion of the origins of the Indians in Book 9, the accounts of the Indus and Ganges

⁶⁹ Isid., *Etym.* 9.2; 14.3–6; 15.2. For further discussion of this order, and its implications, see Merrills (forthcoming).

⁷⁰ Oros., *Hist.* 1.2. On Orosius' geography, see esp. Janvier (1982) and Merrills (2005) 35–99.

⁷¹ On Isidore's geographical sources, see Philipp (1912–13).

in Book 13, and the short description of the city of Nysa in 15. Geography could function as a very efficient retrieval device for certain specific points of information, but also created a new series of levels on which the *Etymologies* as a whole could be read.

Order in the alphabet

Isidore adopted many other systems of organisation within his work, from Aristotelian genera to the description of gems according to their colour, but it is the alphabetised system of Book 10 that seems most remarkable.⁷² At the midway point in his grand project, between the discussion of peoples and families in Book 9 and the human body in Book 11, Isidore inserts a lexicon of substantive adjectives, arranged alphabetically, by their initial letter only. No explicit explanation is included for this radical shift from the thematic organisation of the earlier books, with the result that the reader is thrust almost immediately upon the *aeros*, *auctor* and *actor* of the opening section.

In itself, the alphabetical arrangement of material in a commentary or reference work was not particularly new. Isidore's direct inspiration almost certainly came from Jerome's commentaries on the proper names and toponyms of scripture, which are exploited at length elsewhere in the *Etymologies*.⁷³ Each of these commentaries combined alphabetical organisation with an ordering based upon the text being glossed. In his *Book on the Meaning of Hebrew Names*, for example, Jerome arranged his entries first by the book of the bible in which they appear, and then alphabetically by their initial letter in Hebrew, transliterated into Latin. Entries with the same initial letter were then further organised by the order in which they appear within the relevant books. As a result, 'Aethiopia' and 'Assyrians' appear before 'Adam' in Jerome's chapter on *Genesis*.⁷⁴ The toponyms collected in his *Book on the Location and Names of Hebrew Places* are organised first by initial letter, then by the book of the bible in which the entries first appear, and then again by the order in which they appear in the text. So again, 'Ararat' appears before 'Achad' and 'Astarothcarnaim' in his opening section.⁷⁵ This system of organisation may seem strange, but worked well as

⁷² Isid., *Etym.* 2.26 [On Aristotelian *genera*]; 16.7–12 [Order by colour]. On Book 10 see the brief discussion in Henderson (2007a) 140–2.

⁷³ On Jerome's alphabet, see Carruthers (2008) 143–5.

⁷⁴ As they do in *Genesis*. Gen 2:13 [Aethiopia]; 2:14 [Assyria]; 2:19 [Adam].

⁷⁵ Cf. Gen. 8:4 [Ararat]; 10:10 [Achad]; 14:5 [Astarothcarnaim].

a crib for another text, particularly one which had already been committed to memory by the likely reader.

Like Jerome, Isidore only alphabetised the adjectives of Book 10 by initial letter, but his further system of organisation takes a little more unpicking. Beyond that, the entries are arranged according to a nebulous moral system of associations. Adjectives with more positive associations – *clarus*, *celsus*, *castus* – appear towards the beginning of each section, those which are more negative – *corpulentus*, *crassus*, *caducus* – towards the end.⁷⁶ This system is not applied absolutely consistently (thus *candidus* [honest] appears alongside *clodius* [lame], *curvus* [bent] and *caecus* [blind]), but the overall pattern is striking. In many ways, this collision of taxonomies reflects the multi-layered organisation of the *Etymologies* as a whole. The moral organisation, and the placing of the good and pious before the evil or mundane, recalls the structure of divine and human institutions in Books 6–8, even as the heavy linguistic emphasis underscores Isidore’s underlying grammatical structures. It is possible to highlight some of the many structural principles at work in Isidore’s great text, but the scholar would be hard pressed to identify them all.

Memory

The *Etymologies* evidently defies a single ‘reading’. Although it was ostensibly motivated – and often defined – by its grammatical methodology, the text did not represent the straightforward application of a single epistemological practice. Isidore was content to leave etymologising aside when he found it irrelevant, yet at other times happily (and explicitly) included grammatical information even where he held few illusions about its deeper significance. As a compendium of information on the secular and sacred worlds, moreover, Isidore’s *Etymologies* lacked a defining taxonomy or an obvious retrieval system by which the occasional reader could access specific points of information – an issue that was to trouble later encyclopaedists considerably.⁷⁷ The *Etymologies* had structural systems, of course – and lots of them – but the uninitiated reader is left little guidance on the tricky business of navigating from (say) the geographical order of 9.2, through the macro–micro–cosmic structuring of Book 9 as a whole, to the peculiar

⁷⁶ Isid., *Etym.* 10.32–64 [the letter C].

⁷⁷ Fowler (1997) provides a valuable starting point on this debate.

moral lexicon of Book 10. At first blush, Isidore's labyrinth can seem impenetrable, particularly to readers more familiar with post-Enlightenment encyclopaedism.

Recent examinations of medieval memorial practice offer a way out of this maze, and allow Isidore's peculiar composition to be viewed more clearly. In a number of important studies, Mary Carruthers has highlighted the central importance of memorisation to medieval thought – not simply as the passive absorption of written works 'by rote', but as an active and ongoing intellectual engagement which combines writing, reading and memory within daily textual practice.⁷⁸ From this perspective, a medieval reader had not simply committed the *Psalms* (and Virgil, and Augustine) to memory, but continued to employ them: all of his subsequent reading was informed by this knowledge, and could inform it in turn. Texts, then, were not simply works which could be pulled off the shelf: or rather the 'shelf' in this case was not simply the book cabinet or chest in the library, but was also the vast store of previously experienced works which had been learned and ruminated upon over the course of a reader's life.⁷⁹

At the time of Isidore's composition, the commitment of texts to memory was regarded as a *praxis*, rather than an *ars* – as a habit to be learned through application and repetition in the scriptorium, rather than through formal training.⁸⁰ One consequence of this is that very few texts from late antiquity and the early medieval period relate directly to the practice of memorisation, particularly in contrast to the earlier and later periods, but the intellectual and hermeneutic aspects of human memory retained a fascination for the polymaths of the period. As Carruthers' studies have demonstrated, medieval writers and illustrators were fascinated both by the general structural principles by which memories might be ordered, and by the specific features by which individual points of information might be held fast in the mind: the 'exceptionally base, dishonourable, extraordinary, great, unbelievable or laughable things' that the author of the *Rhetorica ad Herennium* had recognised as being the most memorable in the first century BC.⁸¹

The implications of this for the understanding of medieval compilations of knowledge are, of course, considerable. If such texts were intended to be

⁷⁸ See esp. Carruthers (1998) and (2008).

⁷⁹ On this image as a metaphor for memory in the later medieval period, see Carruthers (1998) 108.

⁸⁰ Carruthers (1998) discusses this at length.

⁸¹ *Rhetorica ad Herennium*, 3.22.35: *si quid videmus aut audimus egregie turpe, inhonestum, inusitatum, magnum, incredibile, ridiculum, id diu meminisse consuevimus. . .*

learned and absorbed, designed to be used as filters of understanding for further reading, and not simply as documentary repositories of information, we need to look again at their construction and use. The first – and most obvious – point to make is that a text composed in order to settle in the memory and prompt ongoing reflection would not need a single, over-arching structural system. Indeed, such a structure would be tremendously restrictive once learned, and would limit the creation of new heuristic connections. To return to an earlier example, the *Etymologies* is structured in such a way that the first-time reader would struggle to locate easily what Isidore had to say about the reed-pen and other forms of writing equipment. If this reader had access to a modern index, of course, or to a detailed page of contents, this process would be quicker, and the relevant passages could be accessed, but the strength of Isidore's system would be lost. The allegorical description of the quill-tip as the testaments would be kept, but it is the context of this description – in a section of the text devoted to writing instruments, historic libraries and of course the scriptures themselves – which lends this allusion its power.

Crucially, once the reader was familiar with the *Etymologies* as a whole – once she had taken advantage of the many strategies intended to aid its commitment to memory – each individual passage could also be embedded within new taxonomies and patterns of association. Isidore's reference to the *calamus* immediately recalls the reed-flute of Book 3 (and implicitly associates the 'many voices' of this instrument to the written word of the text); it also anticipates the sweet-smelling grasses of Book 17, which are located towards the end of Isidore's account.⁸² Further examples abound. The *pinna* [feathers] which make the quill recall the birds of Book 12, but also (surprisingly) human ears; the allusion to sailors' dialects in the same passage not only recalls the descriptions of ships in Book 19, but also the multiple languages of Book 9.⁸³ All of these cross-references, and all of these points of access to multiple new taxonomies, would be available to the reader who had absorbed and appreciated Isidore's text in the way that the author intended.

As these examples show, Isidore's speculative etymologies aided the creation of a text which rejoiced in multiple possible readings. Other incidental points of information do the same thing, and help to embed specific points in the memory by locating them within a variety of different contexts. Isidore employed a variety of contrasting approaches to the presentation of

⁸² *Isid., Etym.* 3.20.5 [reed flute]; 17.8.13 [Indian reeds].

⁸³ *Isid., Etym.* 12.7.7 [feathers]; 11.1.46 [which identifies a link between *pinna* and the *pinnula* – the point of the human ear].

material, many of which earlier (and later) theorists of memory had identified as particularly effective vehicles for the presentation of information.⁸⁴ As has been discussed, etymologies had long been appreciated as a pedagogical tool for the teacher anxious to explore the intricacies of the text, and punning and word-play were also valued as a means to commit particular words or phrases to memory.⁸⁵ Isidore's linguistic, aetiological and historical asides thus provided his audience with small nuggets of information that might help to embed them both within their wider taxonomic schemas and within the memory. While there is little in the *Etymologies* that might be described as 'exceptionally base' or 'dishonourable', the text as a whole is crammed with '*inuitatus*', '*magnus*', '*incredibilis*' and certainly '*ridiculus*' things, amply coloured with vivid verbal illustrations, historical or aetiological asides or improbable pieces of folk-wisdom. In this sense, Isidore's text is a perfect illustration of the memorable principles laid down by the *Rhetorica*. As a result, his work constituted a compilation of knowledge that was above all usable, however impenetrable it may at first seem.

This is not to understate Isidore's obvious conviction in the power of etymological explanation in certain aspects of his work. When Isidore asserts the exegetical importance of etymology to the understanding of the patriarchs, the peoples of the Old Testament or many words of Hebrew, Greek or Latin, he deserves to be taken seriously. If nothing else, the extraordinary contortions that Isidore undergoes when attempting to unpack the many names of God at the start of Book 7 demonstrate that he did retain a conviction in the importance of etymology to Christian understanding.⁸⁶ Isidore did believe that there was a truth in words, but this did not blind him to the other important qualities of word-play. Consequently, his interest in etymology needs to be viewed within the context of his broader ambitions as a compiler of knowledge in a usable form.

Conclusion

Isidore's *Etymologies* has been termed the 'basic book of the entire Middle Ages'.⁸⁷ It circulated remarkably widely, and was read, absorbed and exploited by generations of Latin scholars. But while modern readers of the text are struck most by Isidore's extraordinary methodology, his immediate audience would seem to have been little moved by his grammatical

⁸⁴ Carruthers (2008) discusses these at length.

⁸⁵ See esp. Carruthers (1998) 156–9.

⁸⁶ Isid., *Etym.* 7.1. ⁸⁷ Curtius (1953) 496.

games; Braulio is silent on the issue in his hyperbolic praise of the text, and relatively few of its later readers were inspired into linguistic contortions of their own. Instead, the audience to the *Etymologies* plundered it for knowledge, not only in the form of the discrete facts beloved of the Enlightenment encyclopaedists, but as a means to comprehend the world in all its startling complexity. Isidore's etymologising encouraged his audience to view the world in improbable new ways, his peculiar overlapping taxonomies demanded that they did precisely that, and his extensive literary debts (whether cited or uncited), ensured that the whole was filtered through a vast body of existing literature. The *Etymologies* is a strikingly effective heuristic text, and a paean to the world of words in the early Middle Ages.

Encyclopaedic sensibilities of *ordinatio* and *compilatio* in
later medieval English literary culture and the sad
case of Reginald Pecock

IAN JOHNSON

Ordinatio, compilatio and late medieval encyclopaedism

‘It’s the role of the wise man to order’ (*sapientis est ordinare*), said Thomas Aquinas (many times, apparently).¹ To bring things to order enables understanding. And, for Thomas, there are different types of order that we can put to use: parts of a whole have an order among themselves, and are ordered to an end.² The later medieval period, after all, is rightly seen as a golden age of the reorganisation (and reorganisability) of knowledge, where order and reordering were breaking out all over textual culture. This was encouraged and enabled by the revival in the 1200s of Aristotelianism and the ‘ratiocinative scrutiny’³ that came to characterise the treatment of knowledge, texts and argumentative processes. As Malcolm Parkes put it in his classic essay on *ordinatio* and *compilatio*:

The turning-point in the history of the presentation of a text for the academic reader came in the thirteenth century when the rediscovered Aristotelian logic and the consequent interest in more rigorous philosophical procedures entailed the adoption of principles which demanded a more precise method of dissecting and defining human knowledge.⁴

The logical organisation of texts in terms of ordered parts (*ordinatio/ordinatio partium*) was highlighted not only in commentaries on the *auctores* but also in the ways in which texts were packaged in codices. Divisions, subdivisions, hierarchies, connections, argumentative sequences and sources were identified and made visible by such techniques as rubrication, underlining, indexed/numbered division and subdivision of text, marginal annotation, running titles, chapter headings, tables of contents, cross-references, and *tabulae* (alphabetical indices of topics).⁵

¹ Minnis (1984) 146–7 points out that this became something of a catchphrase for Thomas.

² Minnis (1984) 147. ³ Parkes (1991b) 35.

⁴ Parkes (1991b) 50. ⁵ Parkes (1991b) 53–8.

Some of the most important and powerful books of the Middle Ages were triumphs of *ordinatio*. Many of these were high-level compilations. Again, Parkes provides a useful description of the pragmatics of *compilatio* and of how it was generally understood:

In the later Middle Ages a compiler was perceived as one who imposed a new organisation on material derived from the works of others. The compiler assembled, after a process of critical evaluation, concise and important extracts from sources regarded as authoritative and disposed them according to a scheme, or sometimes the framework of a general topic, characterised by its usefulness.⁶

For all that a *compiler* might have claimed with topical modesty only to be repeating authoritative materials, and disclaimed ownership or credit (as if wielding the words of *auctores* were an impotent business), it was his literary role to shape, order and transmit authoritative knowledge at the commanding heights of literate culture. Or as the greatest encyclopaedic compiler of them all, Vincent of Beauvais, put it in the *Libellus apologeticus* that prefaced his mid-thirteenth-century *Speculum maius*:

This work is not in the true sense of the word mine, but it is the work of those authors from whose writings I have put together almost the whole book. For I have added little or nothing that is my own (*ex mea pauca et quasi nulla addidi*). So the authority (*auctoritas*) is theirs, while only the ordering of the various parts (*partium ordinatio*) is ours.⁷

In an age which categorised human science as quintessentially proceeding by a mode that was typically ‘definitive, divisive and collective’ (*modus definitivus, divisivus et collectivus*),⁸ Vincent was in a particularly powerful position, however much he, like his fellow-compilers, took care to distinguish his role from that of the canonical Christian and classical *auctores* who originated authoritative texts in their own words and who might well be further sanctioned by the warrant of a holy life and formidable moral stature (as with scriptural authors, doctors of the church and saints).

The prestigious status of the encyclopaedic compiler was enhanced all the more by the fact that his mission to build up knowledge of creation and human learning was a function of no less an enterprise than the

⁶ Parkes (2000) 91. For an invaluable and trenchantly illuminating reconsideration of the modern scholarship on *compilatio* see Minnis (2006).

⁷ Minnis (2006) 48, translating Van den Brincken (1978) 469–70. For a modern reprint of Vincent, see Vincent of Beauvais (1624), rpt. 1964.

⁸ Minnis (1984) 122–3. For an account of the development of this work see Paulmier-Foucart and Lusignan (1990).

postlapsarian restoration of mankind.⁹ This function was not just some idealistic notion: it was an urgent moral duty. Accordingly, compilations were by their very nature highly user-orientated, with practical educational designs on their intended readerships. So when Vincent advertised his *Speculum* as useful ‘for preaching, for lecturing, for resolving questions, and generally for explaining almost any sort of matter from every art’,¹⁰ he was acknowledging, as well as advancing, the immense reach and cultural sway of *compilatio* and *ordinatio*. Weighing in at 80 books and 9,885 chapters, the *Speculum maius*, with its hierarchy of levels of *ordinatio* encompassing a universe of knowledge, is divided into three main parts, *naturale*, *doctrinale* and *historiale*. The *Speculum naturale* has, at the next level down, as its ordering principle, the 6 days of creation, into which it fits, in due order, materials on man, soul, body, nature etc. There are, for example, ‘171 chapters on herbs, 134 chapters on seeds and grains, 161 chapters on birds, and 46 chapters on fishes’.¹¹ The *Speculum doctrinale*, consisting of 17 books, with 2,354 chapters being drawn from more than 150 cited sources, is designed around the schemes and disciplines of knowledge by which man hopes to recover some of the knowledge and good things lost or darkened by the Fall and original sin – to which end it accommodates the *trivium*, moral and political sciences, the mechanical arts, medicine, natural philosophy, the *quadrivium* and theology. Tracing the trajectory of human history from creation to Last Judgement, the 31 books and 3,793 chapters of the *Speculum historiale* put more than 180 sources to use.¹² Codices of Vincent’s work were frequently accompanied by tables of contents, running titles and other features of layout facilitating consultation and usefulness.¹³

Not untypical, and not unambitious either, in its thematic sweep was Bartholomew the Englishman’s encyclopaedia (c. 1245), *De proprietatibus rerum* (*On the Properties of Things*). Comprehensively documenting and explaining a full inventory of all things made, it packages theological and scientific materials in a totalising *ordinatio* consisting of nineteen books symbolically corresponding with the twelve signs of the zodiac and the

⁹ As Roest (1997) 223, Paulmier-Foucart (2001) 154, and Keen in chapter 13 remind us. It is fascinating also to note how, as Zurndorfer in chapter 24 informs us, Chinese compilations variously balanced the documenting of past knowledge against attitudes towards its use in the future, albeit for more secular reasons.

¹⁰ Meier (1997)’s rendering (126), of Lusignan (1979)’s edition of the *Libellus apologeticus* (118).

¹¹ Parkes (1991b) 60.

¹² For such information see the entry on Vincent of Beauvais in Vauchez (2000) 1520, and the useful University of Nancy pages on Vincent at medievistique.univ-nancy2.fr/?contentId=6819 (last consulted 25/7/12).

¹³ Parkes (1991b) 64.

seven planets. These books start with God and his creation, moving on through the nature of man, society and the phenomena that proceed from the four elements that are the media for human life. They range from water and air to birds and animals, from regions of the earth and mountains to stones and divisions of the year, from angels to the five senses and what they apprehend.¹⁴ It was a chief intent of this encyclopaedia to convey an understanding of the ‘things’ made by the divine author of the Book of Nature. This is of course profitable in itself, but such an understanding is also necessary for interpreting the same ‘things’ when they are variously mentioned in the Book of books, the scriptures.¹⁵

Ralph Higden’s universal history spanning the period from the creation to its completion around 1352, *Polychronicon*, was equally comprehensive of *ordinatio* in turning to the seven days of creation as its structural principle.¹⁶ For all the majesty of the overall chronological sweep of his *ordinatio*, however, Higden was highly conscious that his mode of proceeding was at root a micro-managing business of breaking others’ texts into smaller parts and reordering them without impairing their integrity or value; or as his anonymous fifteenth-century translator puts it pithily in his rendering of the prologue of the *Polychronicon*:

alle thinges excerpte of oþer men ar broken into smalle membres, but concorporate here liniamentally . . . that the ordre of the processe may be obseruede, that to my power the integrite of trawthe schalle not feynte

[all things excerpted from other men are broken down into smaller parts, but are also organised into an order . . . that the order of narrative treatment may be observed, and that, as far as is within my power, the integrity of truth shall not be weakened or misrepresented].¹⁷

Here Higden continues, or at least parallels, the classical encyclopaedic tradition that saw Polybius breaking down geography for the purposes of making universal history and Solinus taking Pliny’s themed account of the world apart for his own ends of selection and condensation.¹⁸

The comprehensive and analytic relentlessness of a compilation in schematising and summarising materials was, then, not just a Foucauldian exercise of ambition in the production and circulation of discourses of knowledge and power, it was also a duty performed under the watchful eye

¹⁴ Bartholomaeus Anglicus (1601) and Trevisa (1975–88)’s English version (ed. Seymour). See also Seymour (1992).

¹⁵ Trevisa (1975–88) *Prohemium* 41.

¹⁶ Higden (1865–86), ed. Babington and Lumby. ¹⁷ Higden (1865–86) 17.

¹⁸ I am grateful to the editors of this volume for pointing out this parallel.

of the Almighty, the ultimate author and judge of all that may and may not be known. Medieval readers of compilations, correspondingly, were in their own turn accorded a high degree of moral responsibility and hermeneutic freedom, as the theologically loaded term, *lectoris arbitrium* (the free will of the reader), commonly used in compilatory discourse, attests.¹⁹ Inasmuch as the compiler repeats the words of others and does not take responsibility for them it is up to the reader to judge whether s/he should accept or reject what s/he reads. In any case, no reader can escape the inalienable responsibilities and opportunities that accompany the God-given free will that he/she must exercise in reading and applying any text.

Middle English literary culture produced numerous compilations with varyingly inventive *ordinationes*. For example, John Gower's *Confessio Amantis* (1390–3) is a collection of tales about love, complicated by being arranged according to the seven deadly sins and a discourse of confession.²⁰ Moreover, the text, in a number of manuscripts, is accompanied by Latin glosses reminiscent of the same academic tradition that produced learned *compilationes*. *The Alphabet of Tales* (mid-fifteenth century?), an Englishing of the *Alphabetum narrationum* of Arnulph of Liège, is an alphabetically ordered collection of exemplary narratives arranged by thematic headwords for the use of preachers in sermons.²¹

Another compilation, written for the Brigittine nuns of Syon Abbey between 1420 and 1440, the *Orcherd of Syon*, redesigns Catherine of Siena's visionary *Dialogo* (or *Liber diuine doctrine*) as seven-by-five alleys through which a religious woman reader may walk according to a *lectoris arbitrium* governed by her changing spiritual preferences and needs. Although the gardener–compiler has bestowed a new (more user-friendly) *ordinatio* on Catherine's original, he takes care to assure his readers that her revelations are still authentically pristine:

write as sche endited in her moder tunge, when sche was in contemplacioun inrapit of spirit, and sche heringe actueli and in þe same tyme tellinge tofore meny what oure Lord God spake in her.²²

[written down as she composed/dictated in her mother tongue, while she was ravished in spirit in contemplation and actually hearing and at the same time telling before many what our Lord God spoke in her.]

¹⁹ Minnis (1984) 201–2 comments on this in Vincent and other compilers. Paulmier-Foucart (2001) 147 discusses this feature of the reader's role in Vincent's compilatory discourse, its ancient lineage and its lexicon: 'This role of the reader, of his *ratio* [reason], of his *voluntas* [free will], of his *libertas iudicandi* [freedom of judgement] is an ancient theme' (translation mine).

²⁰ Gower (1900–1), ed. Macaulay. ²¹ Banks (1904–5). ²² Hodgson and Liegey (1966) 18.

In the best compilatory fashion, a ‘kalender’ of matters precedes the book, to help the sisters negotiate their way round the textual orchard and make it more fruitful and memorable.

No one plays more tantalisingly with the genre of compilation as a game of fiction than Geoffrey Chaucer in his *Canterbury Tales* (1380s and 1390s), which has been seen not only as an encyclopaedia of occupational types, from knights to peasants and nuns, but also as an encyclopaedia of literary genres, spanning romance (from the philosophically high-powered to the popular), moral prose allegory, fabliau, penitential manual, beast fable, Breton *lai*, sermon, fictional autobiography, parody, dramatic monologue, tragedy, *exemplum*, satire and hagiography, to name but a few.²³ He poses as the credulous compiler–reporter of the words of his fictional pilgrims:

For Goddes love, demeth nat that I seye
 Of yvel entente, but for I moot reherce
 Hir tales alle, be they better or werse,
 Or elles falsen som of my mateere.
 And therefore, whoso list it nat yheere,
 Turne over the leef and chese another tale;
 For he shal fynde ynowe, grete and smale,
 Of storial thing that toucheth gentilesse,
 And eek moralitee and hoolynesse.
 Blameth nat me if that ye chese amys.²⁴

[For the love of God, do not judge what I say to be of evil intent, because I must repeat all that is in their tales, be they better or worse, or else I would be making some of my matter false. So therefore, whoever wants not to hear it, turn over the leaf and choose another tale, for he shall find, both great and small, enough historical matter touching on things of nobility, and also morality and holiness. Don’t blame me if you choose amiss.]

So, tales may be read out of order (or not at all) according to reader choice. What is more, Chaucer the Pilgrim takes no responsibility for what tellers say and is unwilling to be blamed for any choices of tale made by the reader. Time and time again he ludically exploits the discourse of mock-compilation until he seemingly runs out of places to hide in the *Retractions* appended to the *Tales*. Here, presumably (but not necessarily) speaking in

²³ Chaucer (1988), *Canterbury Tales* (gen. ed. Benson). See the discussion of Chaucer’s encyclopaedism in Cooper (1983) and the assessment of Chaucer as compiler and author in Parkes (1991b) 61–2 and Minnis (1984) 190–210.

²⁴ Chaucer (1988), *Canterbury Tales* I.3172–81.

his own voice, he confesses his literary works before his readers and God and ‘retracts’ those that are sinful, apparently taking moral responsibility for his *Tales* inasmuch as they ‘sownen into synne’ (‘conduce to sin’ – surely a matter for the reader as well as for the writer).²⁵ At the same time he softens, or even potentially obliterates, the culpability for what he is confessing by claiming that he did it all with a good intent. This is made even more slippery by his citing of the Middle Ages’ favourite *auctoritas* for reading and writing what one likes, namely St Paul’s words in Romans 15:4 that everything that is written is written for our doctrine (a *carte blanche* happily deployed in this period to excuse, for instance, reading the dirty bits in Ovid). The qualified degree of responsibility he takes also has to be seen in the light of the inalienable free will and absolute moral responsibility of his readers:

Now preye I to hem alle that herkne this litel tretys or rede, that if ther be any thyng in it that liketh hem, that therof they thanken oure Lord Jhesu Crist, of whom procedeth al wit and al goodnesse./ And if ther be any thyng that displese hem, I preye hem also that they arette it to the defaute of myn unkonnyng and nat to my wyl, that wolde ful fayn have seyde better if I hadde had konnyng./ For oure book seith: ‘Al that is writen is writen for oure doctrine,’ and that is myn entente./ Wherefore I biseke yow mekely, for the mercy of God, that ye preye for me that Crist have mercy on me and foryeve me my giltes;/ and namely of my translacions and enditynges of worldly vanitees, the whiche I revoke in my retracciouns:/ as is the book of Troilus; the book also of Fame; the book of the XXV. Ladies; the book of the Duchesse; the book of Seint Valentynes day of the Parlement of Briddes; the tales of Caunterbury, thilke that sownen into synne;/ the book of the Leoun; and many another book, if they were in my remembrance, and many a song and many a leccherous lay, that Crist for his grete mercy foryeve me the synne.²⁶

[Now I beseech all those who hear or read this little treatise, that if there is anything in it that pleases them, that they thank for this our Lord Jesus Christ, from whom proceeds all understanding and all goodness. And if there is anything that displeases them, I beseech them also to attribute it to my lack of ability and knowledge and not to my will, for I would readily have said better had I known how. For our book says ‘All that is written is written for our instruction’, and that is my intent. Wherefore I beseech you humbly, for the mercy of God, that you pray Christ to have mercy on me and forgive my sins, and namely for my translations and compositions of worldly vanity, which I revoke in my retractions – the Book of Troilus, also the Book

²⁵ Chaucer (1988) X.1085. For critical discussion of the *Retractions* in the light of *compilatio* see Minnis (1984) 206–10 and Johnson (2007) 254–60.

²⁶ Chaucer (1988) X.1081–5.

of Fame, the Book of the Twenty-Five Ladies, the Book of the Duchess, the Book of Saint Valentine's Day of the Parliament of Birds, the Tales of Canterbury – those that conduce to sin, the Book of the Lion, and many another book, if they were in my remembrance, and many a song and many a lecherous lay –that Christ in His great mercy forgive me these sins.]

The extent, however, to which any work (read or unread) is actually retractable or retracted is unknowable and open-ended, because each case is reader-dependent. Moreover, Chaucer is not just offering his confession to his readers, he is also offering it to the Almighty, whose judgement is beyond Geoffrey himself, us and the earthly discourse of *compilatio*. No one had a subtler appreciation of the fluid boundaries and opportunities of the discourse of compiling than Geoffrey Chaucer.

In the later Middle Ages one of the most empowering and obligating *ordinationes* that a human could elect to follow in either texts or conduct was that of the life of Christ himself, as the Franciscan (and wider) tradition of modelling the totality of one's conduct on Christ, and dedicating it to him, witnesses. Nicholas Love's meditative and homiletic *Mirroure of the Blessed Lyf of Jesu Christ* (c.1410), a rendering of the Pseudo-Bonaventuran *Meditationes vitae Christi* (one of the most successful religious works of the European Middle Ages), had immense authority as a manual of Christocentric piety.²⁷ Moreover, officially mandated by Archbishop Arundel, Chancellor of England, as a set text for the whole nation, this extraordinarily authoritative compilation survives in more manuscripts than any other medieval prose religious work in English (excepting the Lollard bible), and has been reprinted and updated in every century since.²⁸

Love excised a large proportion of the more elevated contemplative matter of his original. In adapting the work for a lay audience not only does Love cut one hundred chapters down to sixty-three, he also, in classic compiler fashion reminiscent of Vincent of Beauvais and Higden, initials his own additions/insertions with an 'N' and the resumption of the Pseudo-Bonaventuran source with a 'B'. Love also provides a new twofold *ordinatio* to his work. Picking up, in his *proheme*, on an idea to be found at the end of the original,²⁹ he explains his *ordinatio* after the days of the week:

þis boke is dyuydet & departet in vij parties, after vij dayes of þe wike, euery day on partie or sune þerof to be hade in contemplacion of hem that hauen þerto desire & deuocion.³⁰

²⁷ Love (2005), ed. Sargent. ²⁸ Love (2005): see generally the editor's introduction.

²⁹ John of Caulibus (1997) 350 (ed. Stallings-Taney). ³⁰ Love (2005) 13.

[this book is divided and partitioned into seven parts, after the seven days of the week, so that every day one part or a portion therof may be had in contemplation by those who have the desire and devotion to do so.]

The reader might read the whole book in a single week, but if he/she could only read/hear a chapter ('sume þerof'), as was more likely with a lay soul who could not spare the time or maintain the attention, he/she would not cover the whole sequence of the *Vita Christi* but could still gain a sense of its proper narrative order recycled every week. For instance, the early days of the week would deal with earlier events of Christ's life and each Friday would cover some element of the Passion. The typical compiler's attitude of stressing reader-choice as regards how and how much to read is clearly coming to the fore. Similarly typical is the presentation of more than one level of *ordinatio*, for the *Mirror* can also be used according to the church year:

Also not onelych þe matire of þis book is pertynent & profitable to be hade in contemplacion þe forseide dayes, to hem þat wolen and mowen; bot also as it longeþ to þe tymes of þe zere, as in aduent to rede & deuoutly haue in mynde fro þe bigynnyng in to þe Natiuite of oure lorde Jesu, and þere of after in þat holy feste of Cristenmesse. & so forþ of opere matires as holy chirch makeþ mynde of hem in tyme of þe zere.³¹

[Also, not only is the matter of this book pertinent and profitable for contemplation on the aforesaid days for those who desire it and are capable, but also as it applies to the times of the year, as in Advent one might read and devoutly have in mind from the beginning [of the text] up to the Nativity of our Lord Jesus, and then read what happened afterwards during the holy feast of Christmas – and so forth of other matters as Holy Church is so minded according to the time of the year.]

The two levels of *ordinatio* (according to week or church year) may even be combined, for the reader can switch from one scheme to the other. This very passage is itself a transposition of material from a different place in the original. It is fitting that such an instruction-cum-permission to the reader to be flexible with *ordinatio* is itself an example of a translator being flexible with the *ordinatio* of his source.

In what constitutes an epilogue at the end of the work, Love takes the principle of reader-choice (*lectoris arbitrium*) yet further, by acknowledging not only a need to maintain in the reader a feeling of novelty but also by recognising that following the days of the week as recommended by the *auctor* might prove boring. He therefore invites his readers not only to use the book according to the times of the church year, if they want to, but

³¹ Love (2005) 13.

even to ignore a programmatic *ordinatio* altogether in favour of picking and choosing *ad hoc* both the location of passages and their length, depending on what seems most comforting, or provides proper consolation, or stirs them to devotion:

Wherefore it semeþ to me beste þat euery deuout creature þat loueþ to rede or [to] here þis book; take the partes þerof as it semeþ moste comfortable & stiryng to his deuocion, sumtyme one and sumtyme an oþer.³²

[Wherefore it seems to me best that every devout creature who loves to read or to hear this book should take its parts as it seems most comforting and stirring of his devotion, sometimes taking one and at other times taking another.]

Lectoris arbitrium is something to be trusted here, as elsewhere. There is also evidence that Love's readers (or those who supervised them) were well able to add new *ordinationes* of their own, as the remarkable Lenten reading plan bound into Longleat House MS 14 attests.³³ This plan lists an ordered selection of chapters to be read on specified Lenten days. This new *ordinatio* is a new refraction of Christ's life particularly fitting for the liturgy and devotion at this special time of year. It is also in accordance with Love's instructions (above) to reorder materials 'as holy chirch makeþ mynde of hem in tyme of þe 3ere'. Had this *extractio* been written out separately it might have ended up as an independent text in its own right.

So far, then, we have seen how discourses of *ordinatio* and *compilatio* spread out across medieval textual culture with an energy and reach befitting their encyclopaedic affiliations and uses. We have seen how these discourses were initially impelled by a boom in scholastic learning and method that was accompanied by a boom in the generation and refinement of scholastic *compilationes* and all-pervasive practices of *ordinatio*. This boom witnessed the emergence of *ordinatio* and *compilatio* as agents, instruments and occasions of late medieval encyclopaedic works (by such as Vincent, Bartholomew and Higden) and of the flourishing of a distinctive and variegated encyclopaedic method. This tradition crossed into, and enriched, vernacular textuality in some intriguing and impressive Middle English examples. Indeed, when we see, amongst other instances of transformation, Chaucer making fictional play of the encyclopaedic and of *ordinatio* and *compilatio*, we have to entertain the notion of a vernacular encyclopaedic literary sensibility.

³² Love (2005) 220.

³³ Love (2005), editor's introduction 133. See also the codicological work on this by Ryan Perry (to whom I am grateful for details of this manuscript feature), forthcoming on the Queen's University Belfast–University of St Andrews AHRC *Geographies of Orthodoxy* project website at: www.qub.ac.uk/geographies-of-orthodoxy (last consulted 25/7/12).

Reginald Pecock's encyclopaedic community

Some of these examples from the Middle English tradition are more explicitly encyclopaedic, others less so. All of them resort, in their own way, to a totalising *ordinatio*. No one, however, was more totalising or ambitious of *ordinatio* than Reginald Pecock. His was an intriguing and genuinely tragic case of someone who took scholastic rationalistic *ordinatio* to an extreme in the mid-fifteenth century, and paid a terrible price. Pecock, Bishop of Chichester, produced a spectacular and controversial encyclopaedic programme of interrelated treatises (fourteen are known; six survive) with interlocking *ordinationes* pitched at different levels of educational ability. The surviving works are: *The Reule of Crysten Religioun* (c. 1443), *The Donet* (c. 1443–9), *The Repressor of Over Much Blaming of the Clergy* (c. 1449), *The Poore Mennis Myrrour*, *The Folewer to the Donet* (both c. 1453–4) and *The Book of Faith* (1456).³⁴ Pecock's purpose was no less than to systematise and teach the entire Christian religion in the vernacular to all levels of educational attainment. His works, aimed at a variety of audiences, sought to render dissent impotent and to promote lay education and piety not by 'fier and swerd or hangement' ['fire and sword or hanging']³⁵ but by charitable recourse to reason and argument in the mother tongue, even though the use of English for theological purposes was frowned on by a rather repressive Latin-minded church at this time.³⁶ Pecock scoffed at the Lollard hermeneutic which decreed that a humble good-living Christian had the full understanding of holy writ,³⁷ but he respected the intelligent and articulate laity, pointing out that their legal and business transactions demanded as much if not more mental agility than the rudiments of theology.³⁸ Given the utter reasonableness (in his eyes) of orthodox doctrine and ecclesiology, he thought that the laity would, through their own logical scrutiny of issues, agree with him and thereby support Catholic tradition and the established church.

As part of his project, Pecock recodified the whole moral law of Christianity under 'Four Tables' of 'meenal' (instrumental) virtues (i.e. virtues to do with 'means' leading to other virtues) and 'eendal' (ultimate) virtues (virtues which are an 'end' in themselves), thereby absorbing, reworking

³⁴ I follow the datings in Simpson (2004) 272. For general studies on Pecock, see Green (1945) and Brockwell (1985). For recent excellent discussion of the intellectual contexts and significance of Pecock's output see Bose (2002) and Ghosh (2005), and for an invaluable study involving biographical context, see Scase (1996).

³⁵ Pecock (1909) 139 (ed. Morison). ³⁶ See Watson (1995).

³⁷ Pecock (1860), esp. 92–110 (ed. Babington). ³⁸ Pecock (1927) 93–4 (ed. Greet).

and putting in better *ordinatio* (so he thought) the familiar cornerstones of the faith (the ten commandments, the seven deadly sins, works of mercy, cardinal virtues, and so on), which in Part 1 of his *Donet* Pecock labelled as no more than ‘loose giblets’ for their lack of order and integrated structure. His Four Tables are more complete, economical and memorable, so he claims, than this unsystematised ‘heepe . . . oute of cours, of ioynt, and oute of liþþ [*limb*], oute of ordre, and oute of dewe processe to gider clumprid’ [‘heap . . . clumped together off-course, out of joint, disarticulated, out of order, and out of due process’]:³⁹

If summe men pretenden þat þe foorme of þe x comaundementis is sufficient doctryne for alle goddis comaundementis, . . . whi hangen þei aboute þe same foorme of x comaundementis suche lose gibiletis as ben þe teching of vij dedli synnes, þe teching of v wittis, þe teching of vij mercyful werkis, and opire mo . . . ?⁴⁰

[If some men claim/pretend that the format of the ten commandments provides sufficient teaching for all God’s commandments, . . . why do they hang around the same format of the ten commandments such loose giblets as the teaching of the seven deadly sins, the teaching of the five wits [senses], the teaching of the seven works of mercy, and others in addition . . . ?]

Pecock’s new *ordinatio* accommodates these loose giblets in his Four Tables.⁴¹ Subsequently, the bishop spends many words in Part 2 of the *Donet* guiding the understandably disorientated reader as to where to relocate the familiar old features of Christian teaching and rules within the Tables. Thus the fourth commandment, “worschip þou þi fadir and þi modir” . . . is pleinli tauzt afore in þe ix^e, xj^e and xij^e chapitris of þe afore going first party, where is tauzt þe attendaunce of a childe to his fadir and modir’ [“honour your father and your mother” . . . is plainly taught beforehand in the ninth, eleventh and twelfth chapters of the preceding first part, where the attendance of a child to his father and mother is taught’].⁴² Here, just as scholars produced indexed alphabetical *tabulae* of topics to fit into existing works,⁴³ Pecock creates connective tissue between his new system and the familiar discursive features (the twelve articles, seven deadly sins etc.) that he seeks to accommodate but supersede. His pedagogic aims, motivated as they are by palpable polemical designs on the laity, undeniably give less leeway to his readership than do some of the *compilationes*

³⁹ Pecock (1921) 147 (ed. Hitchcock). ⁴⁰ Pecock (1921) 146.

⁴¹ His first Table, for example, deploys eight ‘meenal’ virtues: to live ‘leerningly’, ‘preisingly’, ‘dispreisingly’, ‘preiyingli’, ‘bankingly’, ‘worschipingly’, ‘disworschipingly’ and ‘sacramental’: see Pecock (1921) 27–36.

⁴² Pecock (1921) 133. ⁴³ Parkes (1991b) 62–3.

discussed earlier. Indeed, Pecock's bid to recodify and improve the lore and law of God, church and morality smacks of the production and transmission of Foucauldian discipline, even though, for his time, Pecock showed unusual latitude in engaging with the thoughtful laity in endeavouring to win over their free wills with reason rather than with authority alone.

It is characteristic of Pecock that throughout his works his reader is constantly kept aware, by cycles of cross-referencing, of a comprehensive and self-sustaining network of texts catering for different readerships. This endless presentation and re-presentation by Reginald of his own works as forming a comprehensive and self-sufficient system is designed to valorise his *oeuvre* as authoritative and self-evidently canonical. It is telling that Pecock assumes and promotes the same self-glossing and self-contextualising rightness and interconnected completeness amongst his works that biblical commentators assume with the mutually illuminating connections that they draw amongst the various parts of the bible. Establishing a comprehensive textual system servicing the 'hool ful kunnyng of goddis lawe' ['whole and full knowledge and understanding of God's law' (a common term for scripture amongst Lollards)],⁴⁴ Pecock's rhetoric of cross-referentiality implies a correspondingly 'hool ful' form for the system, and this form in turn constitutes a self-valorising demonstration of *auctoritas*. But for all that Pecock wanted as much authority for his project as possible, he was canily conventional enough not to suggest or vaunt himself as an *auctor*. On the contrary, the empowerment came not from himself but from his encyclopaedic discourse of *ordinatio*. Indeed, Pecock's construction of a self-supporting *ordinatio* provided a decorous and compelling format for his supremely ambitious metascriptural summa of human and transcendent reason. By applying and parading a range of manoeuvres of *ordinatio* across his own texts, Pecock could more easily maintain that he was not asserting of his own will alone but, rather, rehearsing the master discourse of reason, a *langue* made by God but thinkable and speakable by humanity. No wonder, then, that Reginald's authorial, or, rather, 'ordinating', voice seems to sound less modest than that of Vincent of Beauvais: his own *ordinatio* uncovers God's order and his *langue* of truth, whilst at the same time being of great instructional force in its structural adaptability.

That teachings in Pecock's works can ostensibly be reworked from treatise to treatise to suit the varying needs and capacities of readers is apparently meant to be taken as a warrant of authority and reason. The *Donet*, for example, is both anterior and posterior to the longer *Reule of Crysten*

⁴⁴ Pecock (1921) 3.

Religioun, another work of Reginald's. On one hand the *Donet* prepares readers for the *Reule*. On the other it gives those who have already read it a detailed, correct and permanent articulation of their reading of the work. The more technical *Folewer to the Donet* expands and elaborates on the *Donet* for the more capable, and *The Poore Mennis Myrroure* is a selection from the *Donet* for the least capable, or as he puts it in his own inimitable way in the *Reule*: 'summe extractis or out drauȝtis be maad into smaler bokis and treticis proporcianable and euere meete to ech mannys mesure of receyvablenesse' ['some extracts or drawings-out be made into smaller books and treatises in proportion to, and ever-suitable for, each man's share and degree of ability to take them in'].⁴⁵

Pecock's universal and flexible system of *ordinatio* is designed to let no Christian fall through its rationalistic net. A concomitant ambitiousness governs the choice of title for the *Donet*. *Donet* is otherwise the name of a standard Latin textbook of the rudiments of grammar (after Donatus, its author). Pecock's *Donet*, however, teaches the *langue*, the rules, of divinity and ethics. Of course, the Middle Ages saw the production of many books which variously taught a range of audiences about faith, theology, the practices of the church and morality. Here, however, Pecock is up to something different. Whereas other makers of books might state that they were but part of larger ongoing traditions and possibilities, Pecock sets about thoroughly restructuring and recodifying a full panoply of teachings in a novel and comprehensive format as part of a larger programme of enabling layfolk to be functionally articulate and self-aware in theology and morality. An ideal combination of homely accessibility and transcendent loftiness is therefore signalled when his work is heralded as the key, the very grammar, to the Christian religion itself:

And siȝen it is so, þat þis book beriȝ him silf toward þe hool ful kunnyng of goddis lawe, even as the comoun donet in latyn beriȝ him silf toward þe hool ful kunnyng of grammer, as it is wel knowun of clerkis in latyn, þerfore þis present dialog myȝte wel and conuenientli be clepid þe 'donet' or 'key' of goddis lawe, or ellis þe 'donet' or 'key' of cristen religioun.⁴⁶

[And since it is so, that this book concerns itself with the whole and full knowledge and understanding of God's law, even as the common Donet in Latin concerns itself with the whole and full knowledge and understanding of grammar, as it is well known by scholars of Latin, therefore this present dialogue might well and conveniently be called the 'Donet' or 'Key' of God's law, or else the 'Donet' or 'Key' of Christian religion.]

⁴⁵ Pecock (1927) 22. ⁴⁶ Pecock (1921) 3.

The *Donet* will not only grant access to useful materials but, more importantly, it will teach an ability – the skill of autonomously parsing and articulating the idiolect and rationale of Christian knowledge. Where Isidore of Seville found knowledge of the universe by investigating etymologies, Pecock articulated knowledge by applying a metaphor of *grammatica*.⁴⁷ It is telling that Pecock should see religion here in terms of an ability to read, because he conceptualises reason itself in terms of reading and books, and this has a parallel in how he interrelates reason and scripture.⁴⁸ For the syllogocentric Reginald, reason has an even greater authority than scripture because all scripture does is replace the reason lost and darkened by the Fall. Reason, not scripture, is

þe largist book of autorite þat euer god made, which is þe doom of resoun, and also þe þe grettist doctour þat is a þis side god him silf, which is resoun.⁴⁹

[the largest book of authority that ever God made, which is the doom of reason, and also by the greatest doctor that is on this side of God himself, which is reason.]

In the *Repressor of Over Much Blaming of the Clergy*, in what might seem at first sight to be a curiously self-undermining metaphor, Pecock declares that just as the authority for a great clerk's sermon lies in the scriptural library book that he uses as his source, so the 'Book of Kynde' (nature, i.e. reason) precedes biblical utterances and is their source for his preaching.⁵⁰ Far from being the vain and artificial plaything of logic-chopping clerks,

⁴⁷ To quote Merrills in [chapter 14](#) (p. 304), this 'provided the central epistemological conceit of Isidore's *Etymologies* – the notion that the names of things offered an important clue to the understanding of the things themselves'.

⁴⁸ Reason, however, cannot do it all, even for Pecock. It cannot provide us with a knowledge of the trinity, incarnation, biblical-historical events etc, which are matters of faith and biblical revelation, in which we have no reason to distrust the divine source: 'feip̃ is a knowing of þingis and trouþis denouncid, affeirmed, reuelid and schewid to vs fro god', which 'may not be had of vs bi natural power oonly' [faith is a knowing of things and truths from God, proclaimed, affirmed, revealed and shown to us], which 'may not be had by us through natural power only'. See Pecock (1921) 108.

⁴⁹ Pecock (1921) 9–10.

⁵⁰ The idea of the Book of Nature is of longstanding importance in encyclopaedic tradition and its presence was felt in earlier and in later periods. Whereas the bible was 'the Book of books', authored by God, creation was in its own way also seen as readable: for creation was 'the Book of Nature' made by the same divine author. Each created thing had its divinely intended place and meaning. To understand creation was to see into God's mind and His design for human history. Nothing, no thing, in creation lacked significance, so it was the duty of the encyclopaedist to inventory, interpret and facilitate the teaching of the Book of Nature. God's creation, by its very nature, is designed according to divine reason, and so, par excellence, is the very stuff of the human body and soul made in God's image.

reason is as God-made and as natural as being born human. Truth, then, is not grounded (though it may be expressed) in

the wordis or writingis of Crist or of the Apostlis, but in the . . . inward preciose book [of resouns doom] . . . buried in mannis soule, out of which inward preciose book and writing mowe be taken bi labour and studyng of clerkis mo conclusiouns and treuthis and gouernauncis . . . of Goddis moral lawe and seruice than myȝten be writen in so manie bokis whiche schulden fille the greet chirche of Seint Poul in Londoun.⁵¹

[the words or writings of Christ or of the Apostles, but in the . . . inward precious book [of reason's doom] . . . buried in man's soul, out of which inward precious book and writing might be taken by the labour and studying of clerks more conclusions and truths and ordinances . . . concerning God's moral law and service than might be written in so many books which might fill the great church of Saint Paul in London.]

It is noteworthy that in downplaying the Book of books (the bible) Pecock still uses the image of a book to describe reason, the interior literacy of the soul. The sermon proceeds from the bible, and the bible in turn proceeds from the doom of reason. In other words, Christ and his apostles do not so much originate their biblical words as they rehearse and exercise pre-existing reason, tapping into its power to generate authoritative meaning. Pecock's metaphor of sermon and library book extends authority beyond, or underneath, the customary foundational text of the bible. To declare moral truths to be grounded in scripture would by analogy now be as indecorous as for a sermon to be declared to be grounded in itself or in its preacher.

But isn't Pecock's metaphor faulty because it is predicated on the very idea that it is meant to be undermining? For does it not declare that a sermon, which is a discourse of Christian moral truths par excellence, is 'groundid' in scripture, when according to Pecock's own argument it should be seen as being 'groundid' in reason? Not really, because the grounding of a sermon in holy writ is, in Pecockian terms, by extension the inevitable grounding of a sermon in reason, even if unwittingly. One effect of Pecock's metaphor, nevertheless, is to make the human soul itself somewhat textual. Reasoning is also like writing, and also like reading. Given Pecock's enthusiasm for common-profit book circulation schemes (in which customised anthologies of suitably edifying and spiritually enabling devout materials were shared by communities of laity guided by clerics like himself)⁵² and for producing books as a form of preaching, it is appropriate that he should picture St Paul's as potentially being filled, not with the sound of sermons, or a congregation,

⁵¹ Pecock (1860) 31–2. ⁵² See Scase (1992).

but with books instead. That reason should be so bookish suits his works for they are more books of reason than of scripture. In accordance with this, his metaphor bestows on the laity the notion that they have in their souls an empowering inner literacy of reason capable of transcending their shortcomings of literacy in this world.

Pecock sought to construct something extraordinary – a genuinely encyclopaedic community, with his works being the authentic and authoritative metatexts of Christianity, through which the experience, beliefs, conduct and sense of identity of an enormous intended (and ultimately universal) body of theologically informed layfolk would be brought into being, maintained and given a significant degree of spiritual autonomy. But it was not to be.⁵³ In the end, reasons that were probably more political than theological undid him: it seems he found himself on the wrong side of the Lancastrian establishment and the Mayor of London, who reported him to Henry VI for alleged theological unsoundness. The formidable Viscount Beaumont was also keen to see him prosecuted, and moved against him. In late 1457 he was examined and condemned for bringing the doctors and church decrees into question and for writing to the laity in the vernacular on ecclesiastical matters. He recanted – in order to avoid becoming Roast Pecock – and in December 1457 in front of a crowd of (reputedly) 20,000 at Paul's Cross, assented to the burning of his books: 'I here openly assent that my said books, works, and writings . . . be deputed unto the fire, and openly be burnt into the example and terror of all other', said Reginald, who afterwards handed over copies of his works to the executioner.⁵⁴ Henry VI saw to it that his reinstatement as bishop proved untenable. Before long he was incarcerated in Thorney Abbey in the Cambridgeshire fens, with no access to a library, and 'nothing to write with, no stuff to write upon'.⁵⁵ And that was his miserable end.

It is one of the great ironies and oddities of English religious history in the Middle Ages that a bishop seeking to defend orthodoxy against Lollardy and dissent should manage to get himself charged with heresy. His career did not have to end this way. Indeed, Vincent Gillespie has recently emphasised that Pecock was all set to become one of the national leaders of the English church.⁵⁶ In addition to his political misfortunes, Pecock's

⁵³ The following account relies on Simpson (2004) 272.

⁵⁴ From the account in Pecock (1860) xlix.

⁵⁵ From the Primate's instructions to the Abbot of Thorney, as translated in Pecock (1860) lvii.

⁵⁶ Gillespie states that Pecock 'wanted a radical rethinking and revitalisation of the Church's catechetical programme, but was not alone in that. Had he not fallen foul of his ecclesiastical and secular opponents, it is likely that he would have been one of the intellectual leaders of the next generation of English bishops': see Gillespie (forthcoming).

cleaving to infallible reason, his continual advertising of it as preceding and informing scripture, his breaking-down and neologising recodification of Christian theology, ethics and catechetics, and his wresting of all these into an educational programme of scholasticised vernacular texts for the laity, were not, in the end, sustained by the culture which he sought to uphold, but they might have been. Had Reginald not found himself on the wrong side at the wrong time, who knows what impact his works would have had? It may have been 'the role of the wise man to order'. If so, Pecock did both more and less than his share of wise work.

16 | Why was the fourteenth century a century of Arabic encyclopaedism?

ELIAS MUHANNA

The Mamluk period in Egypt and the Levant (1250–1517) has often been described as a golden age of Arabic encyclopaedic literature. It witnessed the writing of large-scale compendia by such figures as Shihāb al-Dīn al-Nuwayrī (d. 1333), Ibn Faḍl Allāh al-‘Umarī (d. 1349), and Aḥmad ibn ‘Alī al-Qalqashandī (d. 1418) whose works are vast, multi-themed collections spanning thousands of pages and containing material from a wide range of disciplines. In addition to the behemoths of this encyclopaedic triumvirate, the period was replete with a variety of other, more modestly proportioned, but no less omnivorous works, to say nothing of the many compendious manuals, handbooks, and dictionaries for which Mamluk literature is justly famous.

The goal of this essay is to explore the factors that contributed to this boom of encyclopaedism. In the course of doing so, I aim to shed light on the sociology of scholarship in the Mamluk empire and the ways in which an educated class of religious scholars, scribes, and littérateurs developed strategies for documenting and classifying an ever-growing corpus of accumulated knowledge.

In search of Arabic encyclopaedism

While the history of encyclopaedic writing in the medieval European tradition has been well charted, from its origins in Isidore de Seville’s seventh-century *Etymologiae*, to the massive thirteenth-century *Speculum Maius* of Vincent de Beauvais and beyond, the history of medieval Islamic encyclopaedism remains relatively obscure. In a 1966 article about encyclopaedias in the Arab world, the French scholar Charles Pellat claimed that, to his knowledge, no such survey had ever been written on the subject.¹ In fact, Pellat had been scooped over a hundred years earlier by the Austrian orientalist Joseph Freiherr von Hammer-Purgstall, who produced an initial survey of encyclopaedias written in Arabic, Persian, and Turkish,² drawn from

¹ Pellat (1966) 631, n. 1. ² Hammer-Purgstall (1856–9).

various bibliographical sources.³ The range of works in Hammer-Purgstall's list was expansive, cutting across generic and disciplinary boundaries, but consisted primarily of classifications of the sciences such as al-Fārābī's (d. 950) *Iḥṣā' al-'ulūm* (*Enumeration of the Sciences*), and technical treatises on disciplinary terminology such as Abū Bakr al-Khwārizmī's (d. 997–8) *Mafātīḥ al-'ulūm* (*Keys to the Sciences*).

By contrast, the conception of Arabic encyclopaedism elaborated by Charles Pellat one century later was firmly rooted in the world of *adab* (belles-lettres and other edifying literature) and the writings of its greatest practitioners, figures such as al-Jāḥiẓ (d. 869), Ibn Qutayba (d. 889), Ibn 'Abd Rabbih (d. 940), and al-Mas'ūdī (d. 956). Surveying Arabic literary history from its beginnings through its nineteenth-century 'renaissance', Pellat outlined the contours of an Arabic encyclopaedic canon. He included works of a broadly compilatory character, such as the literary anthologies of Abū Maṣ'ūr al-Tha'ālibī (d. 1038) and Ibn Maṣ'ūr's (d. 1311) famous dictionary *Lisān al-'Arab* (*The Arab Tongue*), but he was careful to distinguish them from what he deemed to be full-fledged encyclopaedias, the greatest exemplar of which was the *Rasā'il Ikhwān al-Ṣafā'* (*Epistles of the Sincere Brethren*), an esoteric compendium of the sciences written by an anonymous brotherhood in the tenth century.

The differences in Hammer-Purgstall and Pellat's treatments stem, in part, from the nebulous character of the phenomenon they were investigating. Defining the term 'encyclopaedia' is a thorny old problem, to which the literature on this subject tirelessly attests. Within the European tradition, the word has been used in different ways over the course of its history, and remains something of a contested category among scholars of encyclopaedic literature. As Ann Blair shows in [chapter 18](#), the modern notion of the encyclopaedia as a bulky yet easily navigated reference work of multidisciplinary scope did not emerge until the eighteenth century, prior to which very few works called themselves encyclopaedias and those that did bore little resemblance to what we think of as encyclopaedic today.⁴

Despite the word's relatively recent vintage, however, scholars have traced the history of European encyclopaedism to the late classical and medieval periods, identifying works by such figures as Martianus Capella, Casiodorus, Isidore de Seville, and Vincent de Beauvais as encyclopaedias *avant la lettre*. The fact of the term's inexistence in the Middle Ages, however, would seem to represent a methodological problem, as Jacques Le

³ Hammer-Purgstall (1856–9)'s sources included Ḥajjī Khalīfa's *Kashf al-zunūn 'an asāmī al-kutub wa 'l-funūn* (Flügel edition), Ibn al-Nadīm's *Fihrist*, Casiri's *Bibliotheca Arabico-Hispana Escorialensis*, and various other manuscript catalogues.

⁴ See Blair (2010); Blair (2006); Henningsen (1966); Simone (1976); Fowler (1997); Bos (1989).

Goff has argued. In a seminal essay, 'Pourquoi le XIII^e siècle a-t-il été plus particulièrement un siècle d'encyclopédisme?' Le Goff suggested that historians should not continue to employ an ambiguous Renaissance category in studying the history of medieval European encyclopaedism, but should rather approach this phenomenon in its own terms. Alas, the challenge of excavating a historically grounded medieval discourse on encyclopaedism has had few takers, given the diversity of the works under consideration and the wide chronological span involved.⁵

If problems of definition and generic classification are present, therefore, in the European context, it is not surprising that they should be compounded upon entering a different intellectual tradition altogether. Indeed, one would be justified in wondering what utility the term 'encyclopaedia' has for the analysis of texts in Arabic, Chinese, Persian, or Malay when its status as a stable category in European literature – particularly before the mid-eighteenth century – is tenuous. In other words, just how 'translatable' is the notion of an encyclopaedia, if one is unsure of what it means in the first place?

Two interpretive strategies suggest themselves at this juncture. On the one hand, scholars working on non-European literatures might eschew the term 'encyclopaedia' altogether and rely solely upon an indigenous nomenclature. Alternatively, the term may be accepted as an analytic category in which a wide range of texts from many different intellectual traditions participate. The challenge of the latter approach is that it seems to bring us back to the question of definition: what essential elements define the encyclopaedia *qua* analytic category? Is there a set of parameters that can encompass texts as chronologically, linguistically, structurally, and materially disparate as Isidore's *Etymologiae*, Wang Qi's *Sancai tuihui*, al-Nuwayrī's *Nihāyat al-arab fi funūn al-adab*, Diderot's *Encyclopédie*, and the online *Wikipedia*?

While these methodological questions are not the primary focus of this study, they provide a useful entry into the topic at hand. Explaining the foundations of Mamluk encyclopaedism requires one to come to grips with what type of phenomenon it was. Did it amount to something as self-conscious and formally defined as an indigenous genre, or should one speak instead of a diffuse encyclopaedic 'ethos' pervading multiple genres and intellectual traditions during this period?

As in the medieval European context, there is no single, straightforward equivalent for the term 'encyclopaedia' in classical Arabic literature.⁶ Each work bears a unique title, as is the case for texts in various classical genres.

⁵ Le Goff (1994) 25. See also Ribémont (1997).

⁶ The terms *dā'irat al-ma'ārif* and *mawsū'a*, which are used in modern parlance, did not emerge until the twentieth century: see Pellat (1991).

However, while medieval Arabic dictionaries, for example, also displayed a multiplicity of titles, the status of lexicography as a self-conscious scholarly discipline with its roots in the earliest history of Islamic civilisation is unambiguous. The subject was taught for centuries alongside other topics such as grammar and prosody, and the author of a dictionary was regularly identified by his biographers as a lexicographer (*lughawī*).

No such professional categories or labels existed for encyclopaedists and their works. The author of an encyclopaedia was typically identified as a master of the discipline in which his work was primarily rooted, even if it contained materials from other disciplines. The three most well-known representatives of the Mamluk encyclopaedic movement are prime examples. Al-Nuwayrī, al-ʿUmārī, and al-Qalqashandī's works situate themselves squarely within the traditions of, respectively: *adab* (belles-lettres); *masālik wa-mamālik* (geography); and *inshāʾ* (epistolography), even though each of these works overflows with material unrelated to its stated focus.

The works' prefaces and authorial interventions lend further weight to the impression that their authors saw themselves as working within three separate disciplines, rather than a common encyclopaedic genre. Al-ʿUmārī states that he compiled his *Masālik al-abṣār* as a corrective to all of the outdated and inaccurate books about geography,⁷ and al-Qalqashandī identifies other scribal manuals as the inspiration for his own *Ṣubḥ al-aʿshā*.⁸ As for al-Nuwayrī, despite his insistence that his thirty-volume compendium was a work of *adab*, his biographers and later manuscript copyists regularly mistook the work for a historical chronicle, no doubt because of the extensive amount of historical material included within it. No one, however, called it an encyclopaedia.

In what sense, then, is it meaningful to speak of a Mamluk 'encyclopaedic movement' at all, if its primary exemplars were not regarded – and did not regard themselves – as participating in any such movement? What justifies the treatment of these works as a unified field? Here it may be fruitful to return to the second of the two interpretive strategies discussed above. Construing encyclopaedism as an analytic category of compositional features – such as exhaustiveness, multidisciplinary, systematic organisation, etc. – represents a way to address the question of what conditions promoted the prevalence of this mode of textual production across various

⁷ al-ʿUmārī states that most of the available texts on geography contain old information, stories about past kings and nations, and obsolete technical vocabulary: see al-ʿUmārī (1924) 2.

⁸ The models al-Qalqashandī aimed to surpass include al-ʿUmārī's *al-Taʾrīf bi-muṣṭalah al-sharīf* and Ibn Nāẓir al-Jayshī's *Tathqīf al-taʾrīf*.

intellectual projects. I am referring, here, not simply to the encyclopaedic works discussed above but to a wider range of compilatory texts – including biographical dictionaries, literary anthologies, universal and specialised lexicons, and professional manuals – all dependent upon the fundamental processes of collecting and ordering knowledge.

Naturally, the production of such works was not unique to the Mamluk period. The texts under consideration, however, tend to differ dramatically from their forebears by virtue of their vastly expanded thematic scope and systematic organisation, the diversity of their source materials, and their elephantine proportions – features which, taken in the aggregate, give the literature of the fourteenth century its encyclopaedic quality. Furthermore, it is not just the quality of such texts that is notable, but also the preponderance: the sheer number of expansive compilatory works produced under the auspices of the Mamluk sultans rivals that of almost any other premodern Islamic polity. Why was this the case? What led to the rise of large-scale compilation as the predominant activity of the Egyptian and Syrian learned elite during the period in question? Or, to put it another way: why was the fourteenth century a century of Arabic encyclopaedism?

Centres of knowledge and power

In Islamic history, the year 1258 looms large. In February, the armies of the Mongol Ilkhanids sacked the Abbasid capital at Baghdad, bringing an end to a dynasty that had reigned – through periods of glory and ignominy – for half a millennium. The ferocity of the attack is the stuff of legend: hundreds of thousands were said to have been slaughtered, buildings were razed to the ground, and the historic libraries of the city were gutted and destroyed, making the waters of the Tigris run black with the ink of discarded books. Following its victory at Baghdad, the Mongol army marched west where, two years later, it would be defeated decisively by the Mamluks at the Battle of ‘Ayn Jālūt.

The traditional narrative has held that after the fall of Baghdad, Cairo inherited its mantle as the political and cultural epicentre of the Muslim world.⁹ Scholars and poets fled from Iraq, finding a welcome home in the colleges of the Mamluk realms even as they spread the news of smoking libraries to their counterparts in Egypt and Syria. The sense of terror that this catastrophe provoked, so the theory goes, was one of the principal

⁹ See Chapoutot-Remadi (1991); Blachère (1970).

factors leading to the rise of the Mamluk encyclopaedic movement, which aimed to forestall the loss of an entire civilisation's intellectual heritage.¹⁰

One can understand the attraction of this hypothesis given the existence of a similar discourse in the context of Renaissance encyclopaedism, but there is very little primary evidence from the sources themselves that bears out this view.¹¹ Furthermore, recent scholarship on the Mongol conquests has complicated the picture of a glorious cultural capital ravaged by alien marauders. Literary reports about Baghdad suggest that the city seemed to have been a cultural backwater long before the Mongols sacked it,¹² and we now know that the post-conquest flow of emigrants was not unidirectional: some escaped from the oncoming tide of the Mongol advance only to duck back behind it once the armies reached as far as Syria.¹³

These qualifications notwithstanding, there can be little doubt that in the two and a half centuries following the sack of Baghdad, the cosmopolitan centers of the Mamluk realms became magnets for scholars and students from all over the Muslim world. The stability and security provided by a rapidly consolidating imperial state represented a fundamental break with several centuries of fractiousness and political turmoil in the central Islamic lands. Among the consequences of this new order was the emergence of an increasingly universal vision in much of the historical and geographical literature of the period, which began to regard its object of study as the Islamic world writ large, rather than a more narrowly defined region or

¹⁰ 'The [invasion] certainly provoked serious disquiet which was translated into the composition of enormous encyclopaedias intended to some extent to preserve the acquisitions of preceding generations at the moment when the Arabo-Islamic world could be seen as despairing of achieving new progress and felt itself threatened by the worst calamities. In the following centuries, the Black Death (749/1348) was further to aggravate this feeling of insecurity': see Pellat (1991) 906.

¹¹ See Ann Blair's contribution in [chapter 18](#), which documents the efforts of Renaissance compilers to prevent 'a repetition of the traumatic loss of ancient learning of which they were keenly aware' (p. 382).

¹² As Michael Cooperson has shown, the Andalusian traveler Ibn Jubayr (d. 1217) visited Baghdad as early as 1184 and described it as something of an intellectual wasteland: 'This ancient city, though it still serves as the Abbasid capital, has lost much of its distinctive character and retains only its famous name. Compared to what it once was – before it fell victim to recurrent misfortunes and repeated calamities – the city resembles a vanished encampment or a passing phantom': see Cooperson (1996) 99.

¹³ The Baghdad-based philosopher Ibn Kammūna (d. 1284–5) was one such example. He moved to Aleppo following the sack of Baghdad, but then returned to the east when the Mongols sacked Aleppo in 1260: see Langermann (2007) 14. In other instances, the Mongols singled out scholars as booty but then patronised them, as was the case of the astronomer al-Ṭūsī (d. 1274), who built his famed observatory under the auspices of Hülegü at Maragha, where a library was also built with the books carried off from the conquests of Iraq and Syria: see DeWeese (2006); Gilli-Elewy (2000).

time span.¹⁴ This is borne out in remarkable fashion by Ibn Faḍl Allāh al-ʿUmārī, the author of the encyclopaedic *Masālik al-abṣār*, who states in the preface of his work that he would not have been able to produce such a text had it not been for his position as a high-ranking secretary in the bureaucracy of a powerful empire, which enabled him to meet travellers from all over the Islamic and Mediterranean worlds. As Zayde Antrim has argued, it was only through ‘the lens of empire [that he was] able to see and describe the diverse and distant lands, from India and Iran, to Mali and Ethiopia, to Morocco and Spain, that together constituted for al-ʿUmārī the “realms of Islam”’.¹⁵

The case of al-ʿUmārī was not unique; all three members of the Mamluk encyclopaedic triumvirate served as career bureaucrats within the imperial government, as did many other scholars and compilers. Meanwhile, those who did not work as direct servants of the state were similarly implicated within the aggregative ethos of the time by virtue of their participation in an increasingly institutionalised scholarly system. As is well known, the Mamluk period witnessed a dramatic rise in the number of educational institutions – particularly *madrasas*, colleges of Islamic law – in its urban centers, in which a variety of subjects were taught.¹⁶ Prior to this period, however, and for much of Islamic history, education did not take place in *madrasas*, but was rather conducted through informal associations between independent scholars who often traveled great distances in pursuit of knowledge, and typically had to find alternate means to sustain themselves while carrying out their scholarly endeavours.¹⁷ In the Mamluk empire, this

¹⁴ As Zayde Antrim has shown in her study of place and belonging in medieval Syria, Mamluk geographers exhibited a ‘broader vision of place’ than their antecedents, whose own writings reflected a preoccupation with more circumscribed territorial referents. Particularly in the fourteenth century, which represented ‘the height of prosperity and stability in medieval Syria’, Antrim argues that the region’s inhabitants conceived of themselves ‘as belonging to and in an empire billed as Dār al-Islām [the Abode of Islam]’: see Antrim (2004) 280–1.

¹⁵ Antrim (2004) 333.

¹⁶ The historical development of the *madrasa* was studied in magisterial fashion by the late George Makdisi, who argued that the first institutional locus of instruction in the Islamic sciences was the *maṣjid* (mosque). Over time, mosques became centres for jurisprudential activity, as Muslims sought to connect their study of scripture and tradition with the legal and social questions facing society. The turning point for the mosque as an educational space, says Makdisi, occurred in the mid-ninth century when the demand for such legal instruction grew, prompting the building of larger mosques with attached *khan* (inns), for out-of-town students and teachers. The final step in the development of the *madrasa* took place in the eleventh century, and was marked by the combination of the duties of the *maṣjid* and those of the *khan* in a single institution under a single endowment (*waqf*). See Makdisi (1981); Pedersen (1986).

¹⁷ Michael Chamberlain, in his study of knowledge and social practice in medieval Damascus, emphasises the political–financial aspect of *madrasas* and the degree to which they represented lucrative positions (*manāṣib*) for scholars, who jockeyed endlessly with each other for the

activity took on an increasingly institutional character through the creation of salaried positions in a wide range of educational loci – a development which presaged, as Joan Gilbert has argued, the emergence of a ‘professionalized and bureaucratized’ scholarly class.¹⁸

A distinctive token of the self-consciously corporate nature of this class was the explosion of biographical literature during this period, primarily in the form of multi-volume, alphabetically-arranged onomastica. Many of these texts were devoted to the notable jurists of different legal schools, but others mapped the intellectual boundaries of other scholarly communities as well, from grammarians to Qur’anic exegetes to hadith transmitters. As Wadad al-Qadi has suggested, the production of these texts marked an important development in the self-consciousness of the learned elite. Not merely lists of names, these works rather presented an ‘alternative history’ of the Muslim community, written by scholars for scholars, as opposed to the historical chronicle, which was primarily written by scholars for rulers.¹⁹

Al-Nuwayrī, the author of the encyclopaedic *Nihāyat al-arab fī funūn al-adab*, is a prime example of an individual whose professional and intellectual trajectory was defined by his experience within this world of institutions. Born in Upper Egypt, he went to Cairo when he was 19 to work in the office of the sultan’s private funds, studying and residing at a local college. Showing talent in his administrative duties, he was given greater responsibility, overseeing various institutions in the course of his career, from the imperial fisc itself to the Bīmāristān al-Manṣūrī, a famous hospital containing ‘wards for various diseases, a lecture room, laboratories, a dispensary, baths, kitchens and store-rooms’ and a school mosque with a library of medical, theological, and legal texts.²⁰ In 1310, al-Nuwayrī was put in charge of the Nāṣiriyya, the college where he had resided as a young man. He was an astute observer of its workings, even supplying the text of its endowment deed in his encyclopaedia. When he eventually retired to devote the rest of his life to composing his encyclopaedia, he availed himself of the Nāṣiriyya’s library, drawing upon its considerable holdings in multiple fields to compile his enormous work.

Al-Nuwayrī’s encyclopaedia was, like its author, something of an institutional product: a work that came to fruition in the context of colleges,

patronage of powerful *amīrs*: see Chamberlain (1994). Jonathan Berkey, while recognising the important role that institutions played, argues that we should not overstate the institutional character of the transmission of knowledge in Islam, suggesting that most learning took place outside the *madrasa* even during its heyday, and that education remained a largely personal and flexible affair; see Berkey (1992).

¹⁸ Gilbert (1980) 134. ¹⁹ al-Qadi (2006). ²⁰ Rabie (1978).

imperial chanceries, and libraries. This environment did not only facilitate the work of a compiler, but also engendered it, insofar as the growing numbers of books and learned people circulating within the network of scholarly institutions could not but convey a sense of the expanding boundaries of knowledge. On the other hand, however, these conditions also made it possible to envision a solution to the problem of too much information, which took the form of the capacious compilatory texts that began to appear in such profusion. The historian Ibn Khaldūn (d. 1406) observed in the late fourteenth century that ‘among the things that are harmful to the human quest for knowledge and to the attainment of a thorough scholarship are the great number of works available . . . and the numerous (different) methods (used in those works).’²¹ The solution to this dilemma (which Ibn Khaldūn regarded as quite unsatisfactory) seemed to be the production of even more books – abridgements, epitomes, commentaries, and compendia – to help the novice wend his way through the great forest of specialised treatises. The production of such works was not aimed at preventing the loss of knowledge (as has been previously supposed), but was more likely a response to the feeling of an overcrowding of authoritative sources, a feeling made especially palpable in the scholarly centers of the Mamluk empire.²²

To reiterate, the boom of encyclopaedic and otherwise compilatory literature during the fourteenth century took place against a cultural backdrop characterised by the consolidation of political power and centralisation of intellectual exchange. In this regard, there are certain congruities in the relationship of encyclopaedism to empire, which may repay investigation, between the Mamluk period and other imperial settings. As Jason König and Tim Whitmarsh have argued, the essential functions of the archive (‘itemisation, analysis, ordering, hierarchisation, synthesis, synopsis’) belong to a discursive form that is ‘characteristically imperial.’²³ Such processes undergird the work of the encyclopaedist no less than that of the chancery official. As we will discuss in the next section, it is little wonder that, during the Mamluk period, these two figures were often one and the same.

²¹ Ibn Khaldūn (1958) vol. 3, 288–91. The anxiety about an overabundance of books is common to many intellectual traditions and historical epochs, and, as recent research has shown, was often mitigated in similar ways. For an excellent discussion of this trope as it appears throughout classical Arabic literature and historiography, see Rosenthal 1995. For approaches to dealing with textual overabundance in the European context, see Blair (2003).

²² Cf. chapter 2 in this volume for a similar discussion of literary ‘overcrowding’ in the Roman Empire.

²³ König and Whitmarsh (2007b) 38.

The cleric and the clerk

The earliest manifestations of Arabic encyclopaedism have typically been traced to a period predating the rise of the Mamluk empire by several centuries: that of the Abbasid caliphate and its glorious literary and intellectual apogee during the ninth and tenth centuries. This was a period that witnessed a florescence of *adab*, a term that has come to refer generically to ‘literature’ in modern Arabic, but which encompassed a broader set of acceptations in the medieval period, including, correct, polite behaviour (i.e., what one scholar has referred to as the Arabic equivalent of the Latin *urbanitas*); a genre of quotable aphorisms and *bons mots* to be cited in polite society; and a collection of philological disciplines which included grammar, knowledge of poetry, and other subjects.²⁴

The main practitioners and originators of *adab* were the *kuttāb* (singular *kātib*), the class of secretaries who served in the Abbasid administration, whose urbane outlook was modeled upon that of their predecessors, the *dibhērān*, Persian scribes in the employ of the Sassanid empire. For this class of officials, a well-rounded education was essential. In addition to being an accomplished litterateur, a secretary was steeped in ‘theology and law . . . philosophy, music, medicine and the natural and mathematical sciences like astronomy, alchemy, arithmetic, geometry and mensuration, mechanics and hydraulics’.²⁵ Testifying to the importance of this encyclopaedic ideal is a wide range of multi-topic compendia from the period in question – works by such figures as al-Jāḥiẓ (d. 868/9), Ibn Qutayba (d. 889), and al-Mas‘ūdī (d. 956) – that comprise what might be called a ‘first wave’ of medieval Arabic encyclopaedism.²⁶

While several parallels between the worlds of Abbasid and Mamluk officialdom might be noted, it is the differences that are most salient to an understanding of what characterised the encyclopaedism of the fourteenth century. In the Mamluk empire, the principal nexus of intellectual and literary exchanges shifted away from the court, where it had been centred in previous centuries, and came to occupy other milieus such as the educational and administrative institutions.²⁷ Furthermore, the increased involvement by religious scholars (the ‘*ulamā*’) in the production of poetry and belles-lettres (*adab*) betokens a blending of the religious and secular ethics, or what Thomas Bauer has called ‘the adabization of the ‘*ulamā*’.²⁸ In contrast to

²⁴ See Bonebakker (1960); Bonebakker (1984); Heinrichs (1995).

²⁵ Bosworth (1963) 98–9. ²⁶ Pellat (1966); Pellat (1991); Chapoutot-Remadi (1991).

²⁷ See al-Musawi (2006). ²⁸ See Bauer (2007b).

earlier periods, when litterateurs (particularly within the highly specialised professional class of clerks) stood apart from the religious establishment, it is difficult to draw a clear division between secretaries and scholars during the Mamluk period.²⁹ Many scholars worked in administration during their careers, and one could rarely rise very high as a bureaucrat without some kind of traditional training in Islamic law. Administration, therefore – and particularly the chancery – served as a key meeting point for individuals with a wide range of specialties, interests, and abilities.³⁰

The copious administrative literature of the period provides a window onto the encyclopaedic culture of the Mamluk secretarial–scholarly classes. In one of the longest chapters of his work – occupying approximately 850 pages – al-Nuwayrī lays out a kind of professional manual, a *vade mecum* comprising a multitude of subjects relevant to the day-to-day dealings of a clerk: samples of praiseworthy epistles, styles of greeting and salutation, guidelines for the practices of good bookkeeping and proper penmanship, and boiler-plate language for every manner of legal transaction, from royal letters of investiture to common divorces.³¹

In addition to the mass of administrative minutiae, however, al-Nuwayrī also speaks more generally about the education of the secretary and his cultivation of eloquence, a process which required the study of various materials – a kind of scribal curriculum.³² At the head of this curriculum, naturally, is the Qur'an, which the secretary must memorise and make a part of his consciousness, such that the appropriate quotation will leap to his mind spontaneously in the course of penning an epistle. Following the Qur'an the secretary should develop a mastery of hadith, Arabic grammar, rhetoric, classical Arabic poetry, belletristic prose, proverbs, constitutional and administrative law, and political history.³³ Just when one thinks the curriculum is complete, al-Nuwayrī casually reminds his reader that, in addition to these basics, the scribe must also be familiar with different kinds

²⁹ See Carter (1971) 46–7.

³⁰ This is apparent from a study of the vocational patterns of Mamluk clerks. As Joseph Escovitz has shown, unlike their Abbasid forebears, most officials in the Mamluk administration had a religious education, and over one third held posts as 'vocational *ulamā*' (e.g. *madrasa* instructors, judges, etc.) or *hadith* transmitters. In other words, the secretaries were not 'a homogeneous caste of "men of the pen" drawn from a small number of scribal families, and devoted only to the smooth running of the Mamluk administration, but rather a heterogeneous group from diverse backgrounds, with strong and active ties to the religious institution': see Escovitz (1976) 55.

³¹ See al-Nuwayrī (1923–97) 7, 8, 9: 1–223.

³² This discussion takes the form of an extended quotation from a treatise by another Mamluk scribe: see Ibn Fahd al-Ḥalabī (1897).

³³ al-Nuwayrī (1923–97) 7: 27–35.

of animals, birds, plants, trees, geographic locales, etc., as he will be called upon to test this multifaceted knowledge in the service of his craft:

As for letters that include descriptions of weapons and implements of war, horses, birds of prey, types of sport, and things of that nature, the scribe is given free rein to do what he can with his own eloquence . . . With regard to horses and birds of prey, and everything related to them from cheetahs and [other] hunting animals, the knowledge of their qualities and the tokens of their skill is essential to the scribe . . . And as for letters meant to exercise the mind and test one's talents – such as boasting jousts between fruits and blossoms, and descriptions of aromatic plants, rivers, streams, canals, creeks, seas, ships, and things of that nature . . . we will present some of them [in a later volume]³⁴

The chapter on the scribal arts, therefore, serves two functions. On the one hand, it presents a wealth of technical and administrative information pertaining specifically to chancery affairs. On the other hand, the chapter also gestures towards the rest of the encyclopaedia – the parts containing cosmological, political, literary, zoological, botanical, and historical information – and insists that these materials are not just relevant, but essential to the formation of the model clerk. This treatment of clerkly erudition prompts several questions. Firstly, we would be justified in wondering just how idealised a picture it was. In other words, was it actually crucial for a scribe to know who the Caliph al-Ma'mūn's favourite singing slave-girl was? Did he truly need to be well-versed in the nesting habits of flamingoes, or the rituals of moon-worshipping cults? Was he really expected to know which aromatic blossoms were capable of being distilled (roses, white willows, and water lilies), and which ones were not (violets, jasmine, myrtle, saffron, and mint)? Did one, in other words, have to be a walking encyclopaedia, just to wield the *kātib's* pen?

As tempting as it is to accept al-Nuwayrī's description at face value, one must assume a certain amount of exaggeration, for, as Maaïke van Berkel has shown, the testimony of the administrative literature regarding the profile of the ideal clerk can be unreliable. Just because famous scribes such as 'Abd al-Ḥamid ibn Yaḥyā (d. 750), Ibn al-Athīr (d. 1239) and al-Qalqashandī were 'well-versed *adīb's* (men of letters) and set great store to erudition', this does not mean that all scribes conformed to this model.³⁵ On the other

³⁴ al-Nuwayrī (1923–97) 8: 212–13.

³⁵ Van Berkel (2001) 89. Al-Qalqashandī himself evinces a prejudice towards the financial clerks who served in the imperial fisc, claiming that they were intellectually inferior to the clerks of the chancery. One wonders if he knew that al-Nuwayrī – whose text contains far more literature than al-Qalqashandī's – had once been the head clerk in charge of the imperial fisc: the height of philistinism, indeed!

hand, even if al-Nuwayrī and his contemporaries exaggerated somewhat about their job descriptions, the profile does not seem to stray that far afield from what we know of the wide-ranging interests of many Mamluk intellectuals. The blending of the cultures of *‘ilm* (knowledge) and *adab* meant, for one thing, that circulating in learned society required fluency in multiple domains, and it is here that one begins to perceive how a text like al-Nuwayrī’s fits into the processes of cultivating, deploying, and constantly renewing and expanding one’s eloquence and erudition.

The Mamluk encyclopaedias were textual products of this ethos. A resurgence of the cosmopolitan, ‘humanistic’ culture of Abbasid literary circles was in evidence, but it had a far broader reach, including religious scholars in its midst, which also changed its character substantially. At the same time, increasing literacy among the ‘middle strata’ of Mamluk society (merchants, craftsmen, etc.) resulted in a vibrant book market, which provided alternatives to patronage for those who wanted to make a living from their scholarly and literary activities.³⁶ By all accounts, this was a good time to be in the book business, good enough for al-Nuwayrī to leave a rewarding job in the imperial administration to work as a copyist of popular manuscripts while he labored away on his encyclopaedia.

Conclusion

In seeking to explain the rise of encyclopaedism in the Mamluk empire, I have focused upon social and political factors, mainly because our knowledge of the social and political history of the period far outstrips our understanding of its intellectual history. Until fairly recently, the scholarly view of the post-Mongol period had regarded it as an age of decadence and decline, a period when Arabic-Islamic culture ‘had exhausted itself since the already distant age of its great prosperity and . . . was scarcely able to make any more obvious progress.’³⁷ The downfall of this approach lies in its ahistoricity, a failure to situate literary texts against the backdrop of their cultural environments, instead examining them through a critical lens shaped by the values and standards of earlier centuries.

In recent years, the study of Mamluk intellectual culture has begun to experience a reorientation, with several scholars challenging the old commonplaces, and advancing our knowledge of important figures from this

³⁶ See Bauer (2007a) 154–5. On the growth of the Mamluk book market, see also Larkin (2006) 220.

³⁷ See Pellat (1991) 906.

period. The suggestiveness of these studies notwithstanding, a more theoretical framework for the analysis of Mamluk literature has yet to be elaborated which is sensitive to (rather than dismissive of) the complexities of navigating a hegemonic literary–intellectual patrimony, and attuned to the various forces at work: conservatism, systematisation, revival and renewal, irony and intertextuality, modernism and meta-discourses. Encyclopaedic texts provide an ideal laboratory within which to develop such an approach, because they embody, to an overwhelming degree, many of the qualities and discursive modes of this period's literature.

17 | Opening up a world of knowledge

Mamluk encyclopaedias and their readers

MAAIKE VAN BERKEL

Introduction

Encyclopaedic texts have appeared in the Arab-Islamic world throughout the ages, from the ninth century until the present day. The era of Mamluk rule in Egypt and Syria (1250–1517) is, however, often labelled as the heyday of Arabic encyclopaedism. Numerous voluminous compendia – modern editions comprising ten volumes and more are no exception – were compiled in this era. The contents of the Mamluk encyclopaedic texts can be poles apart from each other. Some works claim to contain the general knowledge and manners a refined person needs to know. Others are manuals or mirrors for a specific professional class, for example, judges or scribes. Another category consists of surveys for a specific field of knowledge such as zoology, geography or cosmography. Encyclopaedic also were the activities of authors of biographical dictionaries who collected relevant information on the renowned members of the Muslim community. The same can be said about literary anthologists who selected poetry and prose from their own work and from that of others. Finally, there were also scholars putting together general inventories of the sciences.

Obviously, the encyclopaedic works of the Mamluk era are not general encyclopaedias in the modern sense such as, for example, the *Encyclopaedia Britannica*. The Arabic term sometimes translated as ‘encyclopaedia’, *mawsū‘a*, was coined in the twentieth century and it was not until the last quarter of the nineteenth century that an equivalent of the modern encyclopaedia was produced in Arabic. Although the contents of these Mamluk compendia are quite diverse, they all have in common two important features of the encyclopaedic tradition: the encyclopaedists strive for some sort of completeness, and the information in the texts is presented in a certain order and organised in such a way as to be easily accessible.¹

While in the past few decades many interesting studies have been published on Arabic encyclopaedism in general – addressing issues such as the

¹ On the application of the term encyclopaedia in the Arabic context, see [chapter 16](#) by Elias Muhanna, pp. 343–7.

encyclopaedic ideal, its origins, the organisation and themes of specific texts and the developments within certain genres of compilatory texts – many basic questions on Mamluk encyclopaedic activities remain unanswered,² most obviously questions about the typical features of Mamluk encyclopaedism. Were ‘encyclopaedias’ from the Mamluk period simply more voluminous than the earlier ones or were there also innovations in content, style and structure? Did the authors of the Mamluk era have the same background as previous encyclopaedists? Did they serve a new market, a new group of readers? And did they have new visions of what these texts were supposed to contain? In other words, did the Mamluk period witness a paradigm change in encyclopaedism or are the encyclopaedic activities simply more numerous and extensive, but essentially similar to those in earlier periods?

Obviously, not all these questions can be dealt with in this chapter. What I will do here is analyse the structure and internal organisation of encyclopaedic works from the Mamluk period and compare these with encyclopaedic texts from earlier periods. More specifically, I shall attempt to shed light on whether the information in these texts was presented and organised in such a way as to be easily accessible. Did the encyclopaedists seek to facilitate the retrieval of information from their massive compendia? Did they provide their readers with a set of tools and devices to enter their texts and locate specific parts of interest? In other words, can these texts be seen as user-friendly and as works of reference? By focusing on the presentation of the contents in Mamluk ‘encyclopaedias’ by comparison with earlier texts this chapter will be able to explore possible developments in the function, use and readership of these texts.

Encyclopaedic texts give us fruitful opportunities for the study of reading tools. First of all, most encyclopaedic works are comprehensive and complex written texts. Unlike shorter treatises which can easily be read consecutively, bulky encyclopaedias need tools to help the reader extract meaning from the text. Secondly, the kind of information they contain is generally not meant

² For a survey of Arabic encyclopaedism in general, see Biesterfeld (2000b); Chapoutot-Remadi (1991); Van Ess (2006); Van Gelder (1997); Guesdon (1996); Gutas (2006); Kilpatrick (1982); Kilpatrick (1998); Paret (1966); Pellat (1966); Pellat (1991); Shuiskii (1982–9). For studies on specific texts or genres, see, for example, Bakar (1998); Biesterfeld (1985); Biesterfeld (2000a); El-Bizri (2008); Björkman (1928); Blachère (1970); Bosworth (1969); Endress (2006a) with articles on biographical dictionaries, encyclopaedias of jurisprudence, the *Ikhwān al-Ṣafā*, al-Qazwīnī, Ibn Khaldūn and on classifications and origins of Arabic encyclopaedism; Bauer (2007a); Heck (2002); von Hees (2002); Hein (1985); Heinrichs (1995); Kilpatrick (1997); Kilpatrick (2003); Lecomte (1965); Marzolph (1997); Miquel (1967–88); Netton (1991); al-Qadi (1995); al-Qadi (2006); Radtke (1992); de Somogyi (1950); Tahmi (1998); Wiet (1963); Witkam (1989).

to be consumed at one sitting. Not many people would enjoy, for example, reading consecutively the thousand-plus entries on animals in Muḥammad b. Mūsā al-Damīrī's (d. 1405) zoological survey *Ḥayāt al-ḥayawān al-kubrā* ('The Lives of Animals'). The same can be said about the 1150 pages (in modern print) the Egyptian chancery scribe Shihāb al-Dīn Abū l-'Abbās Aḥmad al-Qalqashandī (d. 1418) devotes to different forms and styles of official correspondence.³

Authors and readers of Mamluk encyclopaedic texts consisted of a wide and diverse group from among the upper and middle classes. Scribes were present among them in large numbers. Works dealing with the technical, intellectual and moral requirements of the bureaucratic profession are well represented. Therefore scribes and administrative manuals will be prominent in this chapter.⁴ That these manuals contain practical information for a specific professional group makes them all the more interesting for a study of accessibility of information within a comprehensive text. Professional manuals containing practical information ask for user-friendly features. By analysing specific devices such as tables of contents, cross-references, clearly marked hierarchical arrangements, summaries, alphabetisation and numeration, I hope to demonstrate the ways in which the Mamluk 'encyclopaedias' could have been used by contemporary readers.

Encyclopaedic traditions

Islamic cultural tradition knew the ideal of the generalist erudite person next to the paragon of the specialist scholar, trained in a particular discipline. The ninth-century Ibn Qutayba, author of the encyclopaedic anthology *Uyūn al-akhbār* ('Choice Reports'), refers to both types as follows: 'He who wishes to become a scholar (*'ālim*), let him pursue one branch of knowledge. But he who wishes to become a man of letters (*adīb*), let him take the best of everything.'⁵ That said, Ibn Qutayba was both a specialist and a generalist. He was one of many examples who proved that the two types of intellectuals were not mutually exclusive.⁶ The ideal *adīb* was a walking and talking encyclopaedia, a well-versed generalist, an entertaining talker with a quotation to suit each occasion. He was equally well-equipped with a set of good manners. In other words, he was the erudite gentleman.

³ al-Qalqashandī (1987) 6, 263–9, 250.

⁴ On the role of scribes in Mamluk encyclopaedism, see Muhanna in [chapter 16](#).

⁵ Ibn Qutayba (1985) 2, 145. See also Ibn 'Abd al-Rabbih (1987) 2, 261.

⁶ For an analysis of the intellectual ideal of the generalist, see Van Gelder (1997).

The knowledge he had to possess and the ideals he had to fulfil were laid down in encyclopaedic works known as *adab*.

One of the most salient early encyclopaedic enterprises is the fifty-two ‘Epistles’ or ‘Treatises’ (*Rasā’il*) written at some stage in the tenth century by, probably, a number of authors from Basra, known as ‘the Sincere Brethren’ or ‘the Brethren of Purity’ (*Ikhwān al-Ṣafā’*). In their ‘Epistles’ the Sincere Brethren touch upon a wide variety of disciplines: mathematics, astronomy, botany, zoology, geography, music, metaphysics, theology and magic. However, their aim goes beyond the mere collection of interesting information. Consumed in the right order the ‘Epistles’ are supposed to lead their readers on the path of purification to happiness, first, in this world, but, ultimately, in the next world. In this way the ‘Epistles’ stand apart from many other encyclopaedic texts of the Arab-Islamic world.⁷

Ibn Qutayba and the Sincere Brethren came from Iraq, the heartland of the Abbasid empire and one of the main, if not the main cultural centre of the Muslim world in the ninth and tenth centuries. But other regions too produced their own encyclopaedists. The Cordovan Ibn ‘Abd Rabbih (d. 940), for example, wrote his encyclopaedia *al-‘Iqd al-farīd* (‘Unique Necklace’) under the Umayyads of al-Andalus. In its introduction Ibn ‘Abd Rabbih explains the motives for his enterprise by saying that ‘people from each generation and scholars from each nation’ leave their knowledge and every now and then the best of this knowledge should be collected and summarised.⁸ Also in another part of the Islamic world, in Iran, a series of authors – Ibn Rusta (fl. early tenth century), al-Khwārazmī (fl. late tenth century) and al-Bīrūnī (d. c. 1050) – wrote important encyclopaedic works on a variety of topics.

These early Arabic encyclopaedias – written between the late ninth and early eleventh centuries – built on Greek, Persian and Indian traditions. They appeared contemporary to, or shortly after, the peak of the Perso–Arabic and Greco–Arabic translation movements of the Abbasid era (eighth–tenth centuries). They incorporated material from, for example, classical Greek philosophy, Sasanian books of etiquette, Byzantine administrative manuals and Indian advice literature.⁹ They appeared in an era that witnessed an explosion in the production of written texts in general which was stimulated by, among many other factors, the introduction and dissemination of paper.¹⁰ This culture of writing and books is illustratively presented in

⁷ *Ikhwān al-Ṣafā’* (1957). ⁸ Ibn ‘Abd Rabbih (1987) 1, 4.

⁹ Endress (2006b); Gutas (1998); Gutas (2006). ¹⁰ See, for example, Bloom (2001).

the tenth-century *Fihrist* by the Baghdadi bookseller Ibn al-Nadīm, a huge index of books on miscellaneous topics, grouped according to sciences.

Especially, when compared to the development of literacy and literary culture in early medieval Europe, the production of written texts in the ninth- and tenth-century Islamic world is overwhelming. Moreover, this period witnessed the development and dissemination of a literate mentality: civil servants expressed their corporate identity in expertise in writing, legal specialists edited and standardised the formulas of model legal documents to make these documents legally watertight, intellectuals became to rely more and more on information taken from books, and, religious experts discussed the advantages and disadvantages of the written transmission of the prophetic traditions.

However, from the middle of the eleventh century onwards Arabic literary culture witnessed a period of crisis which also resulted in a decrease in encyclopaedic activities. This crisis was caused by regime changes, political unrest and the rise of non-Arabic-speaking rulers. Traditionally, the era of Mamluk rule in Egypt and Syria, has been identified as a continuation of this literary decline. The ruling elite, the Mamluks, were former slaves of mainly Turkish, nomadic and non-Muslim origins who had been brought to Egypt and Syria at a very young age to serve as military slaves in the household of their patrons. The better part of the period was characterised by fierce factional competition and violence at the top of the ruling elite. This political instability is often held responsible for a lack of quality in literary life. Moreover, the emphasis of this newly converted elite on strict orthodoxy is considered to have caused a lack of intellectual innovation and a preference for established canons.¹¹ The prominence of encyclopaedic work in the Mamluk period has been presented as one of the most striking features of the era's decadence.

As a result of this negative evaluation the literature of this period has until recently been neglected by scholarship. While statements on irrelevance, lack of creativity, loss of originality, decline and decadence abound in scholarship, serious studies on Mamluk authors and texts are still scarce and a great many literary products remain unedited. This lacuna has been put on the agenda by Thomas Bauer in his prominent 2005 article in *Mamlūk Studies Review*.¹² Bauer convincingly explains how the paradigm of literary decline in the Mamluk period was coined by scholars of the second half of the nineteenth century. These scholars saw decadence and

¹¹ See, for example, Petry (1981) 25.

¹² Bauer (2005). See also Bauer (2007a) for his review of Allen and Richards (2006); Lowry and Stewart (2009).

stagnation in Islamic history at the moment when European history was ascending from its 'dark ages'. In this narrative, Islamic history only served as bystander and supplier of European history. The heyday of Islamic culture and civilisation, often referred to as the 'classical period', performed its task of the transmission of knowledge of antiquity to the west in a period when Europe itself was wrapped in darkness. In the pejoratively so-called 'post-classical period', from the twelfth century onwards, Islam had fulfilled this task and stagnation and decline set in.

However, recent studies show quite the contrary. They emphasise the innovative and vital character of Mamluk literature. Encyclopaedism also underwent a revival and expansion in Mamluk Egypt and Syria from the late thirteenth century onwards.¹³ Most Mamluk encyclopaedists do not seem to think of themselves as solely canonising knowledge from earlier centuries. Admittedly, they refer to numerous works of previous generations, but they also emphasise the lacunae they intend to fill with their works, both by presenting the material in a new, more useful, order and by adding new information and correcting outmoded ideas. The fifteenth-century chancery scribe al-Qalqashandī, for example, notes in his administrative manual:

I studied the technical terms contained in *al-Ta'rīf* and *al-Tathqīf* [two earlier secretarial manuals by respectively Ibn Faḍl Allāh al-'Umarī (d. 1349) and Ibn Nāẓir al-Jaysh (d. 1384)]. Yet, where they went silent, I continued with my explanation by presenting examples, which were near to the source and were of the best authors. Further I added some extra subjects to the technical terms, the knowledge of which is indispensable for the chancery scribe.¹⁴

Similarly, al-Damīrī informs his readers in the preface to his alphabetical encyclopaedia on animals, *Ḥayāt al-ḥayawān*, that he writes this work not because someone asked him to write it and not because he has a natural disposition for such an undertaking, but because he wished to correct false notions about animals. Knowledge on animal life was seriously lacking, so he says. One day in class his teacher mixed everything up. He could not distinguish between the vulture and the male ostrich and bracketed the heron and the wolf together with the mystical egg-producing woman Bassūs. Hearing all this al-Damīrī felt a survey on animal life was badly needed.¹⁵ Rather than canonising knowledge out of fear for its loss, the authors of

¹³ For an analysis of the social and political factors that contributed to this revival, see Muhanna in this volume.

¹⁴ al-Qalqashandī (1987) 1, 35. ¹⁵ al-Damīrī (1994) 1, 2.

the encyclopaedias of this age seem to have built on earlier encyclopaedic traditions by taking the best of their predecessors and adding new material.

Like early encyclopaedism Mamluk encyclopaedic activities coincided with an explosion of books and a flourishing of literary culture in general. In the ninth and tenth centuries the court had been the main patron of literary activities; in the Mamluk period the market became more diverse and more extensive. The Mamluks and their predecessors, the Ayyubids, had invested in the educational institutions of their realm and thus produced a rise in the number of scholars. These men of letters worked as religious scholars, teachers, chancery scribes and judges. Among them were even literate artisans and merchants.¹⁶ With the dissemination of literacy, the market for literary texts had also increased and voluminous encyclopaedias found their way to this market.

Function and uses

Mamluk encyclopaedists seem to have aimed at completeness. The pursuit of integrating ‘all there is to know’ is often reflected in the titles they chose for their works. Shihāb al-Dīn al-Nuwayrī (d. 1333), for example, entitled his monumental work *Nihāyat al-arab fī funūn al-adab* (‘The Ultimate Ambition in the Branches of Erudition’). The Egyptian Bahā’ al-Dīn Abū l-Faṭḥ Muḥammad al-Ibshīhī (d. after 1446) gave his immense popular encyclopaedia the title *al-Mustaṭraf fī kull ma mustaṭraf* (‘The Most Appreciated Precious Topics from Every Art Regarded as Elegant’). Sometimes authors express their claims for comprehensiveness in the prefaces of their texts. Al-Qalqashandī, for example, writes in the introduction of his manual for scribes:

Authors who wrote about this art had different intentions for their work and they used different sources in collecting and writing their books. [...] There was, however, not yet a work in which these intentions were combined and no book that provided the main authorities and sources of the skill.¹⁷

In a similar way the aforementioned encyclopaedist al-Ibshīhī considers his compilation more comprehensive than those by his predecessors. He states in his introduction that he hopes that ‘its reader will find in it everything he seeks and wishes to know’.¹⁸ Encyclopaedias from the Mamluk period

¹⁶ See, for example, Chamberlain (1992); Lowry and Stewart (2009) 5.

¹⁷ al-Qalqashandī (1987), 1, 31. ¹⁸ al-Ibshīhī (1991) 1, 7.

tend to be bulky, often much more voluminous than the early encyclopaedias from the ninth and tenth centuries. Al-Nuwayrī's *Nihāyat al-arab*, for example, consists of thirty-three volumes in the modern edition, Ibn Faḍl Allāh al-'Umarī's (d. 1349), *Masālik al-abṣār* ('The Roads of Visions') of twenty-seven volumes, and al-Qalqashandī's *Ṣubḥ al-a'shā* ('The Daybreak for the Sufferer of Nightblindness') of fourteen volumes.

How could readers find their way through these thousands of pages? Did authors try to make their texts user-friendly and if so, how did they seek to facilitate the retrieval of the information? Since my research on the presence of reading tools was inspired by medievalists working on the Latin west, I will continue here with a short survey on the development of reading tools in medieval Europe. Having said this, it is important to note that this excursus serves only as an illustration of the relevance of these questions. The reading tools developed in the medieval west did not, to the best of my knowledge, influence similar developments in the Middle East, at least not in the period studied in this chapter.

Clearly, there are numerous ways to read a text. First, the function and genre of the text often dictate a specific way of reading. A novel is supposed to be read from cover to cover; each sentence and each word form part of its structure and give meaning to its plot. On the other hand, a dictionary is generally not read consecutively. Not many people tend to enjoy reading dictionaries from cover to cover. But it is not only the genre which is important. One and the same text can also be read in various ways by various readers. A first-year student, for example, has to explore his textbook as a whole. He must read the text, probably several times, try to memorise its contents, unravel the interrelationship between its various themes and identify the relative importance of particular sections. Hopefully, in later years this student still uses his textbook, but by then its function has changed. It has become a book of reference which might be consulted for a forgotten date, name or event. The textbook has to meet the needs of both types of reader. The ways in which both types use this textbook finds expression in the presentation of the information. A chronological or geographical order, a table of contents, cross-references, and variations in font and character size reflecting the hierarchical structure of the text, facilitate the reading of the first-year student who is looking for synthesis. On the other hand, the senior student profits from an auxiliary text such as an alphabetical subject index which will enable her/him to locate the particular pieces of information in which s/he is interested.

Modern readers take these tools for granted. But tools such as these have not always been part of the presentation of written texts. Research on literacy

in the medieval Latin world has shown that many of these tools evolved in the Middle Ages.¹⁹ Two periods are particularly interesting for the introduction and dissemination of readers' tools: the late sixth and seventh centuries, and the thirteenth century. The intervening periods saw the gradual growth in sophistication of various tools.

The first period, the late sixth and seventh centuries, saw the introduction of the division of words by spacing and the experimentation with systems of punctuation. These developments were accompanied by two other innovations: the use of initials to indicate various divisions in the text and the introduction of paragraph signs. Both innovations were refined in the following centuries.²⁰

The second period of interest for the introduction of reading tools was the thirteenth century. This period witnessed the invention of an alphabetical subject index, the numbering of pages and folios and the sophistication of a system of references to other texts and cross-references within the text. These devices are closely connected with one another. Obviously, an alphabetical subject index could not have functioned without an unambiguous system of references to either parts of the codex (pages or folio numbers) or to existing divisions of text (books and chapters). Another tool for the reader, the table of contents, also profited from the introduction of references to page numbers.²¹ The development of the thirteenth-century tools enabled readers to break into a text and consult parts of it.²² The context in which these thirteenth-century tools emerged was the growing concentration upon pastoral ministry and preaching and the consequent need for a well-trained clergy provided with easily accessible books.

For the premodern Arab-Islamic world no systematic research has been conducted on reading tools. Quite a few studies have appeared on the organisation of knowledge in general and the arrangement of contents in specific texts.²³ These studies analyse the ordering principles in texts, the systems of classification and the way in which these orders and classifications reflect attitudes towards knowledge in general and its various fields in particular. Only a few of these studies refer, however, to the ways in which the

¹⁹ See, for example, Meier (1997); Mostert (1995); Mostert (forthcoming); Parkes (1993); Rouse and Rouse (1979); Saenger (1997); Schmitt (1977).

²⁰ Parkes (1993) 9–61. See also Alexander (1978). ²¹ Rouse and Rouse (1979) 11–23 and 29.

²² The term 'consultation literacy' was coined by the medievalist Marco Mostert in an article on the evidence for a so-called 'second phase' in the development of the western literate mentality from the thirteenth century onwards: Mostert (1995) 323–4.

²³ For studies see n. 2.

internal organisation of the information could facilitate reading.²⁴ Similarly important for the study of reading and consultation tools are studies on the Islamic manuscript tradition. The development of markers for levels of textual structure, for example, can be gleaned from studies dealing with the layout of written texts on the page.²⁵ However, like the studies on the arrangement of contents, most of the surveys on the layout of manuscripts do not deal, or not in detail, with the question of how the layout affects the ways in which readers could use the text.²⁶

Tools for the reader in Mamluk encyclopaedias

Prominent in this research on reading tools are four outstanding and well-known Mamluk encyclopaedic texts, all of which have been mentioned before: *Nihāyat al-arab fī funūn al-adab* by al-Nuwayrī (d. 1333), *Ḥayāt al-ḥayawān al-kubrā* by al-Damīrī (d. 1405), *Ṣubḥ al-a‘shā fī šinā‘at al-inshā’* by al-Qalqashandī (d. 1418) and *al-Mustaṭraf fī kull ma mustaṭraf* by al-Ibshīhī (d. after 1446). These compendia share a comprehensiveness as to contents and are organised in such a way as to facilitate the retrieval of information. In many other respects they are quite diverse. Some authors present their subject matter in a descriptive manner and do not refer to a clear practical application of their text. Others are concerned with giving rules and guidelines and their works can therefore be classified as prescriptive.

Al-Nuwayrī was a high-ranking scribe working for the Mamluks in both Egypt and Syria. His voluminous *Nihāyat al-arab* was written between 1314 and 1330. It deals with a wide variety of topics, among which are cosmography, geography, fauna and flora, but the bulk of it (the work as a whole occupies twenty-one volumes in modern print) is devoted to history, starting from creation until al-Nuwayrī’s own days. The former Egyptian tailor al-Damīrī became a professional theologian and lecturer later in his life. He is famous for his alphabetically arranged zoological survey of animals, *Ḥayāt al-ḥayawān*, which was completed in 1371–2. This encyclopaedia contains discussions on, for example, the exact pronunciation of the animals’ names, their characteristics and habits, their kinds, references to them

²⁴ Very valuable exceptions are, for example, Wadad al-Qadi’s remarks on the features of later biographical dictionaries (in comparison to earlier texts within this genre) and the way in which these allow readers greater access to the text, and Syrinx von Hees’ discussion of al-Qazwīnī’s *‘Ajā’ib al-makhlūqāt* and the intended readership of the text. al-Qadi (2006) especially 67–71; von Hees (2006).

²⁵ See, for example, Déroche (2000); Gacek (2001).

²⁶ An important exception is the very valuable study by Rosenthal (1947).

in prophetic traditions and proverbs and the medicinal uses of the various parts of their bodies. The Egyptian chancery scribe al-Qalqashandī wrote his most famous work, *Ṣubḥ al-a‘shā*, in 1412. With the *Ṣubḥ al-a‘shā* Arabic administrative literature reached its peak. It is a voluminous work containing practical information for the profession of the Mamluk scribe, encyclopaedic information regarded as part of the scribe’s general cultural baggage and a history of the bureaucracy from the early days of Islam. The text as a whole is interspersed with model documents from the chancery. Al-Ibshīhī, finally, was born in 1388 in the Fayyūm oasis in Upper Egypt. He seems to have worked as a preacher. His *Mustaṭraf* is often qualified as an encyclopaedia of *omni re scibili*.²⁷ It combines moral and ethical matters with entertaining anecdotes, witticisms and lines of poetry.

To identify possible chronological developments in the application of reading tools, some earlier encyclopaedic texts will serve as material for comparison. These earlier encyclopaedias include: *Kitāb al-ḥayawān* (‘The Book on Animals’) by al-Jāḥiẓ (d. 868/869), an anthology of anecdotes and poetry based on animals, discussing topics such as their food and the influence of the environment on their characteristics; two encyclopaedias by Ibn Qutayba (d. 889), an administrative manual *Adab al-kātib* (‘The Education of the Scribe’) with sections on philology, arithmetic, jurisprudence and history, and the more general *Uyūn al-akhbār* (‘Choice Reports’), with miscellaneous sections on the ruler and his duties and rights, war and its traditions, the art of conversation, table manners and how to choose one’s friends; the administrative manual *Kitāb al-kharāj wa ṣinā‘at al-kitāba* (‘The Book on the Land-Tax and the Craft of Writing’) by Qudāma b. Ja‘far (d. 948), discussing grammatical, linguistic, geographical, philosophical, political and judicial matters; finally, the previously described tenth-century *Rasā’il* (‘Epistles’) by the Sincere Brethren. Clearly, there is space in this chapter only for an outline picture. A more complete view of these developments would need to cover a wider sample of texts.

Although Arabic manuscript traditions developed differently from those in the Latin west, the analysis of Mamluk encyclopaedias results in the identification of similar tools for readers. These tools can be classified under four headings. Firstly, the formal divisions of the text: the extent of the hierarchical structure (books, chapters, subchapters etc.), the consistency of the application of this structure and the way in which this structure is visible in the layout on the pages of the manuscript. Secondly, the arrangement of the text’s contents: obviously, the implementation of a systematic order,

²⁷ See Marzolph (1997) and Vadet (1986) 1005.

whether it be chronological, geographical, according to discipline, social stratification or gender, makes it easier for readers to identify the coherence between the various parts of the text and to locate specific pieces of information quickly. Special attention will be paid to the use of alphabetisation as a method of organisation which for obvious reasons played such an important role in the development of subject indices in medieval Europe and can be an equally important tool for readers in the main body of the text. Thirdly, system(s) of cross-reference: a system for referring either to other parts of the text (books, chapters etc.) or to parts of the codex (pages, folios, columns etc.) is important for the development of auxiliary texts such as indices and tables of contents. Lastly, the presence of auxiliary texts. Arabic encyclopaedic texts of the Mamluk era do not usually contain subject indices.²⁸ However, another important auxiliary text, the table of contents or *tabula capitulorum*, is added to almost all Mamluk encyclopaedic texts.

The encyclopaedic texts of the Mamluk period contain a very refined and detailed formal structure, especially when compared to the ninth and tenth century works by, for example, Ibn Qutayba, al-Jāḥiẓ and the Sincere Brethren.²⁹ Mamluk authors such as al-Nuwayrī, al-Qalqashandī, al-Ibshīhī and many of their contemporaries used multiple levels (books, chapters, sections and so on) of textual structure. The horizontal divisions within one level are generally divided by means of numeration. By far the most elaborate structure can be found in the *Ṣubḥ al-aʿshā* by al-Qalqashandī. This text sometimes contains up to twelve hierarchical levels compared with, for example, three (or sometimes four) levels in the much more voluminous encyclopaedia of al-Nuwayrī. Al-Qalqashandī generally announces the internal position of separate sections in the larger structure of the text to make sure his readers don't lose track. At the beginning of the first book (*maqāla*), for example, he states:

The first book (*maqāla*), after the introduction, deals with all the skills and disciplines indispensable for the chancery scribe, and it contains two chapters (singular *bāb*); the first chapter (*bāb*) is about the general disciplines, and it contains three sections (singular *faṣl*); the first section (*faṣl*) discusses in general terms the disciplines useful for a scribe.³⁰

²⁸ For a description of a few isolated instances of index-making in the Mamluk era, see Rosenthal (1947) 40.

²⁹ The only exception among the early encyclopaedias is the work by Qudāma b. Jaʿfar, which is divided into numbered books which are in turn subdivided into numbered chapters.

³⁰ al-Qalqashandī (1987) 1, 175.

And later on in the titles of the subdivisions he repeats the upward levels to which the particular section belongs, before announcing its downward divisions. Thus he states, for example:

Section two (*faṣl*) of chapter one (*bāb*) of book one (*maqāla*) is about the indispensable knowledge for the scribe in the field of *inshā'* (the composition of documents), it is divided into two paragraphs (singular *ṭaraf*); the first paragraph (*ṭaraf*) is on the skills a scribe needs and this paragraph is divided into fifteen subparagraphs (singular *naw'*); the first subparagraph (*naw'*) is about the Arabic language and has four divisions (singular *maqṣid*); the first division (*maqṣid*) is about the superiority of the Arabic language over other languages and on how it distinguishes itself from the other languages.³¹

Unfortunately, the system is not always applied consistently and at the lowest levels the author himself sometimes loses his grip on the numerous subdivisions.³²

The formal divisions of the Mamluk texts are also visible in the layout on the page.³³ The titles of the various sections are distinguished from the body of the text by means of rubrics, spacing, underlining (sometimes with red ink), variation in size of letters, the use of bold letters or a combination of these signposts. Rubrics seem to be particularly popular in manuscripts of Mamluk encyclopaedias. The use of red ink as a signpost for the divisions of the text was sometimes even explicitly recommended by contemporaries such as Badr al-Dīn Muḥammad b. Jamā'a (d. 1333) and 'Abd al-Bāsiṭ b. Mūsā al-'Almawī (d. 1573) in their treatises on the written transmission of knowledge in the field of jurisprudence and *hadīth*.³⁴ The latter writes: 'For the sake of greater clearness in the indication of the arrangement of the text, red ink may be used without hesitation for chapter headings, paragraphs, sections and the like'.³⁵ Rubrics and other signposts are important reading tools. They help readers to distinguish visually the various divisions of the text and to locate the beginnings of new sections. In Mamluk encyclopaedias

³¹ al-Qalqashandī (1987) 1, 183. ³² al-Qalqashandī (1987) 4, 45–51.

³³ The analysis of the arrangements in the layout are based on the following manuscripts: four manuscripts of *Nihāyat al-arab*: Leiden University Library, Or. 2f, 2i, 2l and 19b, all autographs; three manuscripts of *Ḥayāt al-ḥayawān al-kubrā*: National Library Cairo, ṭabī'a wa kīmiyā' 143, 1665/6 AD; Leiden University Library, Or. 14.099, no date; Leiden University Library, Or. 409, 1478–89 AD; two manuscripts of *Ṣubḥ al-a'shā*: Egyptian National Library, adab ṭal'at 4745, 1412 AD; Egyptian National Library, adab 1519, 1484/5 AD; two manuscripts of *al-Mustaṭraf fī kull ma mustaṭraf*: Egyptian National Library, adab 284, 1665/6 AD; Leiden University Library, Or. 279, 1590/1 AD.

³⁴ Ibn Jamā'a, *Tadhkirat al-sāmi' wa-l-mutakallim fī adab al-'ālim wa-l-muta'allim*, fourth chapter, and al-'Almawī, *Mu'īd fī adab al-mufīd wa-l-mustafīd*, sixth chapter.

³⁵ al-'Almawī, cited in Rosenthal (1947) 18.

their application is, however, not always consistent, in the sense that the various levels in the hierarchical structure (books, chapters and subchapters) are not always indicated by standard signposts. The title of a chapter could be in bold and underlined at one time, while it is in red ink in the same manuscript at another time. Any variation is possible, but headings are always in some way distinguishable from the body of the text.

Rubrics and other signposts were not new for the Mamluk period. They appear already in the earliest Arabic manuscripts of the Qur'an and also in manuscripts of the early encyclopaedias. Unfortunately, a full chronological survey of the application of these various signposts in encyclopaedic manuscripts is not possible at this moment. A wider sample of manuscripts would be necessary. Moreover, one should take into account that the presence and application of signposts in the layout of encyclopaedic manuscripts cannot be explained solely in terms of the development of consultation tools, but should also be studied in terms of genre, status, intended readership and ownership of the text.

Evidently, any text needs a certain order in which the information embodied in it is presented. All Mamluk encyclopaedists show an interest in the arrangement of contents of their works. Even al-Ibshīhī's *al-Mustaṭraf*, where order is hard to decipher at first sight, contains a logical sequence of topics. It runs from religious, serious and ethical to more frivolous and entertaining themes, and back again to religious topics.³⁶ Other authors explicitly explain and justify their arrangement of contents. Al-Nuwayrī, for example, states in the introduction to the historical section (the fifth book) of *Nihāyat al-arab* his choice for the presentation of the material according to dynasty:

When I saw that all those who wrote the history of the Muslims had adopted the annalistic form rather than that of dynastic history, I realised that by this method the reader was being deprived of the pleasure of an event which held his preference and of an affair which he might discover. The chronicles of the year draw to a close in a way which denies awareness of all the phases of an event. The historian changes the year and passes from east to west, from peace to war by the very fact of passing from one year to another. The reader can only follow an episode which interests him with great difficulty... I have chosen to present history by dynasties and I shall not leave one of them until I have recounted its history from beginning to end.³⁷

³⁶ For a more detailed analysis of the arrangement of contents of this encyclopaedia, see Marzolph (1997) 410–413 and 419 (containing a list of its chapters).

³⁷ al-Nuwayrī (1923–97), 13, 2. Translation by Chapoutot-Remadi (1995) 159.

Most Mamluk authors applied a combination of various kinds of orders. Al-Qalqashandī uses, for example, chronological, geographical, religious and hierarchical orders to structure his text, often in the same chapter. In [chapter 1](#) (*bāb*) of Book 3 (*maqāla*) on Islamic titles, for example, he discusses successively: titles of caliphs, with a chronological order within this paragraph; titles of kings, structured according to geographical areas; titles of others, including soldiers, bureaucrats, religious leaders, Sufis, merchants, artisans and women. In [chapter 2](#) (*bāb*) of Book 3 (*maqāla*) he continues with titles of non-Muslims.³⁸

Alphabetical order – such a fertile device in the development of consultation tools in medieval Europe – is present only in al-Damīrī's *Ḥayāt al-ḥayawān*. Al-Damīrī justifies his choice of alphabetical order by stating that it guarantees that all the obscure names of the animals become thus easily legible.³⁹ The origin of the application of alphabetical arrangements in Arabic encyclopaedias needs to be studied in more detail. Although al-Damīrī was the only one among our encyclopaedists to apply such an order, he is certainly not the first to make use of this type of arrangement. On the contrary, alphabetisation was, for example, an approved principle of organisation in biographical dictionaries since the ninth century. Sometimes the usefulness of this method is even explained in advance. In the eleventh-century *Ta'rikh Baghdād* ('History of Baghdad'), for example, the author, al-Khatīb al-Baghdādī (d. 1071), states that his intention is to facilitate the consultation of his text by using alphabetical order. His only deviation is that in honour of the Prophet of Islam, all persons by the name of Muḥammad are mentioned before all others.⁴⁰ Interestingly, in her studies on biographical dictionaries Wadad al-Qadi notices an increase in the Mamluk era in both the number of alphabetically arranged dictionaries and the extent of alphabetisation, 'with all letters of the first name, as well as those of the father's name, and sometimes even the grandfather's name, being taken into consideration'.⁴¹ Al-Damīrī also takes all letters of the animal names into account and not just the first letter.

The third tool for readers to be considered is a system of references. The Mamluk encyclopaedias do not contain references or cross-references to numbered folios, pages or columns. These kinds of reference were very uncommon in the Arabic manuscript tradition of the era. An isolated

³⁸ al-Qalqashandī (1987) 6, 118–64.

³⁹ al-Damīrī (1994) 2. For a more detailed analysis of the arrangement of contents of this encyclopaedic text, see de Somogyi (1950).

⁴⁰ See Rosenthal (1947) 38. ⁴¹ al-Qadi (1995) 105. See also al-Qadi (2006) 68–69.

example of this kind of reference has been recorded by the Damascene physician and bibliographer Ibn Abī Uṣaybi'a (d. 1270). While praising his teacher Ya'qūb b. Saqlāb for his precise and careful quotations from Galen, Ibn Abī Uṣaybi'a says:

Frequently he referred to a statement by Galen and said: 'Galen made this statement on such and such leaf of such and such book of his work on . . . ' In this place, Ibn Saqlāb mentioned the title of that particular work of Galen. The reference was to a manuscript in Ibn Saqlāb's possession. He had read it so often and was so familiar with it that he could quote it in this manner.⁴²

Mamluk encyclopaedists insert cross-references in their texts in two ways. They use either very short and imprecise descriptions – 'as mentioned previously' – or they refer to specific sections of the texts – 'this has also been discussed in our section on the various religions and sects' or 'this will also be discussed in the epilogue of this book'.⁴³ This type of cross-reference was old and approved. Ninth- and tenth-century encyclopaedists refer to other parts of their text in a similar way.⁴⁴

Finally, one of the most important tools for readers in Mamluk encyclopaedias is the table of contents. Almost all Mamluk encyclopaedists added tables of contents to their works. Al-Damīrī's alphabetically arranged zoological survey is the only exception. Since none of the studied earlier encyclopaedias contain these auxiliary texts – unfortunately, we do not know if Qudāma b. Ja'far's manual had one since the first part of his book is lost – we may conclude that the table of contents is a reading tool applied much more frequently in the Mamluk era than before. Some of these tables only mention the main divisions of the work. Al-Ibshīhī, for example, inserts a true *tabula capitulorum*, summarising the numbered chapters (singular *bāb*) of his book with the appropriate titles. The underlying sections (singular *faṣl*) which are also numbered, are absent in his table of contents. Others such as al-Nuwayrī sum up all levels of the hierarchical structure (books, sections and chapters) with corresponding titles and numbers:

The first book (*fann*) is about heaven and heavenly features and about the earth and earthly characteristics and it is divided into five sections (singular *qism*); the first section (*qism*) is about heaven and it contains five chapters (singular *bāb*); the first chapter (*bāb*) is about the beginning of the creation of heaven; etc.⁴⁵

⁴² Ibn Abī Uṣaybi'a, 'Uyūn al-anbā' fī tabaqāt al-aṭibbā', quoted in Rosenthal (1947) 38.

⁴³ See, for example, al-Qalqashandī (1987) 9, 233, 11, 390 and 2, 192.

⁴⁴ See, for example, Qudāma b. Ja'far (1981) 37: 'We mentioned this in the third book'.

⁴⁵ al-Nuwayrī (1923–97) 1, 4.

Again Al-Qalqashandī provides the most detailed table of contents, for he even adds small summaries of the various subsections of his work. Moreover, as we have seen above, he provides similar summaries in the body of the text at the beginnings of most chapters. Admittedly, these tables of contents do not contain references to folio or page, which certainly would have helped to locate specific sections quickly in the body of the text. However, with the refined structure of the text, partly visible in the layout on the page, it would not have taken a reader too long to retrieve a particular section.

Accessibility for a wider audience

What does this study on reading and consultation tools tell us about the function and readership of Mamluk encyclopaedias? Mamluk encyclopaedic texts contain several tools for readers. By comparison with the development of tools for readers in texts from thirteenth-century Europe the Mamluk devices are relatively simple. Alphabetical subject indices and the numbering of pages are absent in Mamluk encyclopaedias and arrangements in the layout of the manuscript are not always consistent. This does not mean, however, that these Mamluk texts were not accessible or user-friendly for readers. On the contrary, formal divisions of the text, rubrics, arrangement of contents, cross-references and tables of contents facilitated access to and consultation of these works, especially when used in combination with one another.⁴⁶

A comparison with the early period of Arabic encyclopaedism – a major source of inspiration for Mamluk encyclopaedists – provides us with interesting conclusions on shifting techniques and visions over time. Compared to encyclopaedias from the ninth and tenth centuries, Mamluk compendia tend to be equipped with more and more refined tools for the reader: a much more detailed formal structure, a comprehensive table of contents and a strong emphasis on organisation of contents, the rationale behind which is often explained in the introduction of the book. We may thus conclude that generally speaking, Mamluk encyclopaedists aimed more at making their texts user-friendly than did their predecessors from the ninth and tenth centuries. Interestingly, similar conclusions have been reached by Wadad al-Qadi with regard to biographical dictionaries. Al-Qadi detects four main shifting features in late biographical dictionaries when compared

⁴⁶ For an analysis of the retrieval of a particular piece of information in al-Qalqashandī's *Ṣubḥ al-aʿshā*, see van Berkel (1997).

with their earlier counterparts, all of which ‘make using the dictionaries much easier, thus allowing their readers greater access to them’.⁴⁷

What motivated Mamluk encyclopaedists to make their works more accessible? Obviously, the Mamluk authors build on earlier encyclopaedic traditions and most genres and literary traditions tend to become more structured over time instead of the other way around. But perhaps the main factor that motivated them to invest in the accessibility of their texts was the rise of a new and broader audience. The Mamluk era was characterised by an increase in literacy. Not only the number of scholars grew, but also a group of non-scholarly literati, among whom merchants and artisans became consumers of written texts and engaged in literary culture. These ‘bourgeois upper and middle classes embraced literature as a means of self-expression’, as Thomas Bauer has argued.⁴⁸ And since knowledge of the literary and scholarly canon was indispensable for social status within the group as a whole, I would argue that Mamluk encyclopaedists catered for this increasing market of non-specialist readers, and perhaps especially for the upwardly mobile groups among them who wanted to gain familiarity with the elite standards and norms.⁴⁹ Non-specialists were more dependent upon reading tools than specialists. With their emphasis on accessibility, Mamluk encyclopaedists opened up a world of knowledge to the ever-increasing group of literati of their age.

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- al-‘Almawī, *Mu‘īd fī adab al-mu‘īd wa-l-mustafīd*, see Rosenthal (1947).
 al-Damīrī (1994) *Hayāt al-ḥayawān al-kubrā*, 2 vols., Beirut.
 Ibn ‘Abd Rabbih (1987) *al-‘Iqd al-farīd*, ed. M. M. Qamīḥa *et al.*, 9 vols., Beirut.
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 Ibn Jamā‘a, *Tadhkirat al-sāmi‘ wa-l-mutakallim fī adab al-‘ālim wa-l-muta‘allim*, see Rosenthal (1947).
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 Ikhwān al-Ṣafā’ (1957), *Rasā’il*, ed. B. al-Bustānī, 4 vols., Beirut. See also El-Bizri (2008).
 al-Jāḥiẓ (1938), *Kitāb al-ḥayawān*, ed. ‘Abd al-Salām Muḥammad Hārūn, 8 vols., Beirut.

⁴⁷ al-Qadi (2006) 67. ⁴⁸ Bauer (2007a).

⁴⁹ al-Qadi (2006) 67–8 has similar conclusions on the audiences of biographical dictionaries.

al-Nuwayrī (1923–97), *Nihāyat al-arab fī funūn al-adab*, 33 vols., Cairo.

al-Qalqashandī (1987) *Ṣubḥ al-aʿshā fī ṣināʿat in-inshāʾ*, ed. M. H. Shams al-Dīn, 14 vols., Beirut.

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PART III

Renaissance encyclopaedism

The Renaissance has long been associated with ‘encyclopaedism’, primarily for two different reasons which are not directly related to one another. On the one hand the term was first coined in the late fifteenth century, though without many of the connotations we associate with the term today, to designate an ideal of learning which spanned and highlighted the relations between many disciplines. On the other hand many Renaissance writings, from compilations in various fields to novels and poetry, are considered encyclopaedic today because of their large bulk and/or their ideal of exhaustive and multidisciplinary scope. Only occasionally did early modern authors apply the term ‘encyclopaedia’ to what we consider their encyclopaedic compiling activities, but by the late seventeenth century a handful of works had begun to forge the connection between the term and a kind of reference book. The success of Ephraim Chambers’ *Cyclopaedia* (1710) and Diderot and d’Alembert’s *Encyclopédie* (1751) established the ‘encyclopaedia’ as a title of a genre which was imitated faddishly throughout the eighteenth century and which has been going strong ever since. My main interest in this essay is to ponder the intellectual foundations of the encyclopaedic ambitions of large-scale compilers in the Renaissance – what was new about Renaissance encyclopaedism and what motivated these innovations – while attending to the gradual convergence between the term ‘encyclopaedia’ and our concept of encyclopaedism.

The ‘encyclopaedia’ and encyclopaedism in the Renaissance

The term ‘encyclopaedia’ was coined in the late fifteenth century by humanists convinced that they were reviving an ancient Greek term, ‘enkuklopaideia’, designating the circle of learning.¹ Angelo Poliziano and Guillaume Budé were among the first to use the term in Greek and in Latin, to

I am grateful for valuable feedback to Elizabeth Keen, Anthony Grafton, William N. West and the editors of this volume.

¹ For the most recent treatment of the history of the term, see West (2002) 15–18. For discussion of key passages in Poliziano and Budé, see Simone (1976) 242–3, 260.

emphasise the value of a humanist education that embraced all the disciplines in their interconnections. Equivalent terms first appeared in French and English in the early 1530s.² Careful philological work in the twentieth century has concluded that the term never existed as such in antiquity but resulted from a corruption of the Greek ‘enkuklios paideia’ which meant general culture or common education. Debunking the etymology takes nothing away from its historical force. ‘Encyclopaedia’ was used regularly in the Renaissance to designate the links between the disciplines, with an emphasis on their connection to one another and of each of them to one central discipline (usually rhetoric and/or ethics), following the metaphor of the circle.³ As recently as 1985 the *Britannica* included, in addition to *Micropaedia* and *Macropaedia*, a volume called the *Propaedia* which proclaimed the descent of the encyclopaedic genre from an ancient term for the circle of learning and offered a circular depiction of the interconnections between the disciplines today (which was a favourite theme of the editor Mortimer Adler).⁴

But the modern notion of encyclopaedism does not emphasise the theoretical classification of the disciplines – witness the oblivion into which the *Propaedia* fell (not even mentioned in the *EB* on-line), probably as soon as it was published. Instead encyclopaedism in modern parlance emphasises rather the accumulation of information across a broad array of topics and disciplines, for which the Renaissance is rightly famous. Interest in the theory of classification of the disciplines, while well represented in the Renaissance, was not unique to it, given the medieval treatises also devoted to the question.⁵ Instead, what historians have generally emphasised as distinctive of Renaissance encyclopaedism is the increased range and size of Renaissance treatments of all kinds of topics, from bibliographies to natural histories to cabinets of curiosities, from encyclopaedic poetry and fiction (du Bartas or Cervantes) to encyclopaedic treatises on particular topics like cosmography or agriculture.⁶ This heaping impulse was also central to the explosion in the number and size of what I call ‘reference works’ (most centrally: dictionaries, florilegia, and commonplace books) which I have tried to track

² See Rabelais, *Pantagruel* (1532), ch. 20, where Thaumaste says of Panurge that he had opened for him ‘le vray puy et abisme de encyclopédie’. *OED* records the first occurrence in English (to designate the ‘circle of doctrine’) in Thomas Elyot, *The Boke named the Governour* (1531), 1.xiii.

³ See Céard (1991). ⁴ *Encyclopaedia Britannica* (1985).

⁵ On Renaissance classifications, see Blair (2007); for an entry into medieval classifications, see Weisheipl (1965) and (1977), Dahan (1990), Steneck (1975) and Lutz (1956).

⁶ See for example: Guillaume du Bartas, *La sepmaine, ou creation du monde* (1581); Miguel de Cervantes, *Don Quixote* (1605); Sebastian Münster, *Cosmographia universalis* (1544); Olivier de Serres, *Théâtre de l’agriculture* (1600).

and explain elsewhere, and to the accumulation of manuscript notes which provided the raw material from which most large books were produced. Consider for example the growth of the dominant printed florilegium, the *Polyanthea* of Domenico Nani Mirabelli, which started at 430,000 words in 1503 (while the largest medieval florilegia weighed in around one tenth of that) and grew to 2.5 million words by the early seventeenth century; or the career of the *Theatrum humanae vitae* of Theodore Zwinger, a systematically arranged commonplace book with elaborate alphabetical and systematic finding devices, which started at 1.8 million words in 1565 and fostered a sequel, the *Magnum theatrum humanae vitae*, which was the largest compilation of its time at 10 million words (7,600 folio pages bound in 8 volumes), printed in 5 editions from 1631 to 1707. Personal collections of notes reached massive proportions too, the record being attributed to a German professor of mathematics and natural philosophy, Joachim Jungius (1587–1657): the 45,000 pages of his notes which survive are estimated to represent only one third of the collection he had amassed at his death.⁷

Early modernists, including myself, have often pointed to three main sources to explain this new scale of accumulation in the Renaissance: the discovery of new worlds, the recovery of ancient texts, and the proliferation of printed books.⁸ For example, Brian Ogilvie has traced the explosion in the number of known plant species, from the 500 discussed in antiquity by Dioscorides and which represented the height of botanical learning in 1550, to the 6,000 plant species listed by Caspar Bauhin in his *Pinax theatri botanici* (1623).⁹ Similarly, I can track the growth in the number of excerpts from ancient and modern authors cited in early modern florilegia, as the sayings of poets, philosophers, and orators were added onto the traditional authorities of bible and church fathers. Finally, printing made the sources from which to accumulate more readily available, including travel reports and humanist editions but also the compilations of excerpts and summaries of all kinds which facilitated further cycles of compilation.

Certainly printing facilitated encyclopaedism by making it less expensive to produce books, including large ones, and by increasing the number of books available to excerpt from, and Renaissance discoveries of ancient texts and distant places also offered new material to sort and store. But the decisive novelty behind Renaissance encyclopaedism, I argue, was not the new discoveries of texts or species, but rather the new level of care devoted to recording, saving and managing information about familiar places and

⁷ See Blair (2010) 117–32 (on reference genres), 180–1 and 197 (on word counts), 71–4 (on collections of notes); on Jungius, see Meinel (1995), 166, 168.

⁸ See Blair (2003) and Grafton (1992). ⁹ Ogilvie (1997).

authors as well as new ones. Ogilvie points out, for example, that New World plant specimens were not what drove the botanical explosion – instead it was the Renaissance naturalists’ desire to describe plants with careful attention to detail that made them newly aware of vast numbers of unidentified plants mostly in old places: in Europe’s own backyards (including eastern and northern Europe) and long-known exotic locations like the Levant.¹⁰ In my work focused on textual compilations I have come to a similar observation: it was not the newly recovered ancient texts (Lucretius or Sextus Empiricus) which boosted the size of ever-larger compilations, but rather long-familiar ancient authors central to humanist education (Ovid, Horace, Cicero) and a variety of recent authors and compilations generated by reflection on the classics (e.g. Petrarch or the emblems of Alciati and Camerarius).¹¹

Neither printing nor new materials to study explain why the learned were willing to invest so much effort and money in amassing large collections of textual information in their manuscript notes and printed books. Underlying the learned reaction to all this input was the most important causal factor of all: a cultural impulse that sought to gather and manage as much information as possible. This info-lust was manifest not only in the explosion of textual compilations in manuscript and in print, but also in the contemporary attention to collecting objects of many kinds, from *naturalia* to coins and works of art.¹² The abundant note-takers and compilers who produced encyclopaedic works articulated a new enthusiasm for attending to every book and every discipline in the search for potentially useful information. The reasons behind this attitude were no doubt complex, but I will focus on how the compilers articulated their motivations. Renaissance compilers often mentioned that they hoped to safeguard all the material they collected against a repetition of the traumatic loss of ancient learning of which they were keenly aware. Many also saw their work as a contribution to the public good which benefitted from catering to as many different themes and interests as possible.

Pliny’s principle: ‘no book so bad . . .’

One expression that appears with variations as a refrain among the encyclopaedically inclined in the sixteenth and early seventeenth centuries seems

¹⁰ Ogilvie (2006) 230 and Cooper (2007).

¹¹ Blair (2010) 178–85 on the growth of the *Polyanthea*.

¹² On the culture of collecting, see Findlen (1994) and Schnapper (1988–94).

to me worth analysing more closely as an entry into the intellectual motivations for encyclopaedism. In one of his letters, Pliny the Younger reported of his uncle, the author of the *Natural History* (one of the few ancient 'encyclopaedias') that Pliny the Elder 'used to say that there is no book so bad that some good cannot be got from it'.¹³ The same passage also reports how Pliny read and was read to at all times, while eating, bathing or travelling, as if he indeed meant to leave no book unread. Pliny took abundant notes too, whether directly himself or by dictating to a slave or servant, and bequeathed to his nephew 166 rolls of papyrus written on both sides in a small hand, after declining to sell his notes when someone offered him the hefty sum of 400,000 sesterces for them.¹⁴ The texts of both Plinys were available during the Middle Ages, but became the object of careful philological analysis by humanists who sorted out the difference between the two authors and were concerned to identify accurately the various species described in the *Natural History*. Pliny was the model encyclopaedist for many a Renaissance imitator and his licence to read and learn from every possible source was invoked by various authors engaged in large-scale collecting, from Conrad Gesner to Marin Mersenne.

Conrad Gesner's *Bibliotheca universalis* (1545) was designed as an exhaustive bibliography of all known works (in manuscript and in print, extant and not) in Latin, Greek and Hebrew, totaling some 10,000 works. Gesner (who also composed massive natural histories of animals and plants, though the latter was printed only in the eighteenth century) offered a number of justifications for his project. He bemoaned the loss of ancient learning, which Renaissance humanists felt especially keenly, and called on scholars to continue to hunt for lost works, aided by his bibliography, and on printers to print them and princes to fund libraries, so that no such loss should be suffered again. Gesner also justified his exhaustive scope, which included barbarian books as well as Christian ones, by explicitly citing Pliny's 'no book so bad'. Gesner noted that books could change their utility over time, with books apparently worthless at one time proving useful later on, and

¹³ *Dicere etiam solebat nullum esse librum tam malum ut non aliqua parte prodesset* (Pliny the Younger, *Letters* 3.5, to Baebius Macer).

¹⁴ 'He used to explain that when he was serving as procurator in Spain he could have sold these notebooks to Larcus Licinus for 400,000 sesterces, and there were far fewer of them then' (*Referebat ipse potuisse se, cum procuraret in Hispania, vendere hos commentarios Larcio Licino quadringentis milibus nummum; et tunc aliquanto pauciores erant*): Pliny the Younger, *Letters* 3.5.17. Licinus was the Praetorian Legate in Spain, c. AD 73. 400,000 sesterces or 100,000 denarii was the property valuation required of the lower section of the equestrian class, a very small and wealthy nobility in Pliny's time; see MacMullen (1974), 293–4. I am grateful to John Bodel for helpful advice on this point.

that even barbarian books could occasionally be found to contain ‘useful and good things’. At the same time Gesner also acknowledged that he would like to see some of those barbarian books destroyed. Nonetheless Gesner included them all: ‘We only wanted to list them, and we have left to others free selection and judgement’.¹⁵ Of course, Gesner offered no access to the books themselves, only mention of their once having existed. And Gesner’s information was used not only to help locate books in order to read them, but also to help suppress books, notably when the Jesuit Antonio Possevino relied on Gesner’s bibliography in drawing up lists of forbidden books.¹⁶ As Possevino’s *Bibliotheca selecta* attests, not all early modern bibliographers shared Gesner’s ideal of an exhaustive list of all books.¹⁷

The ideal of exhaustivity was more difficult and problematic to carry out when pursued with real books rather than just bibliographical references. But in his *Advis pour dresser une bibliothèque* (1627), one of the first advice books on the topic, Gabriel Naudé generally advocated Gesner’s principle of exhaustive collecting. Naudé maintained that ‘a library that is erected for the public benefit ought to be Universal’. A librarian with the public good in mind should not follow his personal preferences in buying books. Alluding to Pliny, Naudé observed that there is ‘no book so bad or decried that it will never be asked for. Mere baubles may become future rarities’. Naudé remarked (as Gesner had) on the changing valuation of books in different times. He also explicitly recommended collecting heretical books and books ‘which teach nothing but vain and unprofitable things’ (such as cabbala and artificial memory), which he reviled more thoroughly than heretical ones. Owning bad books served useful purposes: ‘at the least [to] satisfie those who desire to see them, to refute them, one should collect [them] albeit they ought to be accounted amongst the rest of the Books in the Library but as Serpents and Vipers are amongst other living creatures; like Cockle in a Field of good wheat; like Thorns amongst the Roses: and all this in imitation of the world, where these unprofitable and dangerous things accomplish the

¹⁵ *Nullus a me scriptor contemptus est, non tam quod omnes catalogo aut memoria dignos existimarem, quam ut instituto meo satisfacerem, quo mihi imperaveram sine delectu simpliciter omnia quae incidissent commemorare. . . . Plurimi hodie autores omnibus notissimi sunt, qui proculdubio post centum annos paucissimis cogniti in tenebris latebunt. . . . Nos recitare tantum volumus, delectum iudiciumque liberum reliquimus alijs. Certe non raro quanquam barbari styli scriptores res cognitu dignas acri ingenio chartis mandarunt. Virgilius ex stercore Ennij legebat aurum et Plinius dicitabat, nullum esse tam malum librum, qui non aliqua ex parte prosit. Duplex sane barbarorum genus existit: sunt qui dicendo tantum barbari, res interim bonas et utiles doceant, quos modis omnibus conservari par est: alij ut verbis ita sensis quoque barbari et inutiles sunt, quos equidem quoquo modo abolitos velim.* Gesner (1966), sig. *3v. On Gesner’s sense of loss see Müller (2003) 80.

¹⁶ Balsamo (2001). ¹⁷ On the contrast between Gesner and Possevino, see Zedelmaier (1992).

Master-piece, and the Fabrick of that goodly composition'.¹⁸ Like Gesner, Naudé harboured an ideal of universal coverage, leaving to users the task of making selective judgements suited to their needs, but he also introduced a new kind of justification in the form of the standard natural theological argument – that apparently bad or useless things (whether species or books) served a purpose according to the plan of a benevolent God.

In the same milieu in which Naudé moved in early seventeenth-century Paris (among those whom René Pintard called 'learned libertines'), the minim Marin Mersenne also invoked natural theological arguments in a variant on Pliny's principle.¹⁹ To justify his study of such a lowly subject as the organ (in one of the first treatises on musical instruments), Mersenne observed: 'there is nothing so base and vile in nature or the arts that it is not worthy of consideration'.²⁰ The occasion was anodyne – a standard apologetic for a new topic – but Mersenne's allusion to Pliny's principle, like Naudé's, extended natural theological arguments about the divinely created natural world to the world of human invention. By lumping together 'nature and the arts' Mersenne ignored the potential for significant differences between nature, which was divinely ordained, and the arts developed by humans. While it might be clear that there is nothing useless in the divine plan, it is rather less clear that this would be true of human inventions, but Mersenne took for granted the grounds for the analogy.

In a third variant (after 'no book so bad' and 'no art so vile') Pliny's principle merged with a common natural theological one in Theodor Zwinger's justification for the vast bulk of his *Theatrum humanae vitae*, in which he sorted under headings tens of thousands of examples of human behaviour reported in anecdotes and apophthegms from antiquity to his own time. Zwinger argued that the work would facilitate the teaching of ethical behaviour by example rather than precept, but one historian has argued from its inclusion of entertaining, salacious or gory passages that it 'takes us as far downmarket as a work in Latin could go'.²¹ In the expanded third edition of 1586, which reached 4,500 pages and some 6.3 million words, Zwinger foresaw the risk of criticism from contemporaries and sought to justify the inclusion of examples of bad behaviour alongside the good, pointing out that both were instructive – the bad as examples of what to flee and detest and the good as examples of what to imitate and admire. As a

¹⁸ Naudé (1903) 51–2, 55 (on heretical books). ¹⁹ Pintard (2000).

²⁰ Mersenne (1637), 'Livre quatriesme des instrumens à chordes', proposition xii, p. 212. I am grateful for this reference to Jean-François Gauvin: see Gauvin (2008) 60.

²¹ Moss (1996) 197.

practitioner and professor of medicine at Basel, Zwinger invoked the model of the botanical garden to illustrate this point. 'Because there is no herb so vile that it does not contain some remarkable utility', similarly 'many ugly and obscene things are gathered, not in order that we may set them forth for imitation, but so that by their very shameful and ugly qualities we may frighten off those who are not wholly evil'.²²

Zwinger also alluded to plants to forestall the criticism that his vast collection harboured too many items that were useless:

The Italians like Italian [examples], the Germans German ones, the Scythians Scythian ones. Since we attended to the advantages of everyone, we had to collect examples of every kind. Examples which you may reject as exotic will please another most. Similarly, do not pick from a public field plants which will benefit another, even if they are not pleasing to you: unless perhaps you think that all the others were grown just for you.²³

Early botanical gardens generally featured regulations declaring it 'wicked to pluck branches, flowers or seeds or uproot bulbs or roots'.²⁴ Such rules were no doubt devised to stop visitors from stealing valuable plants for their own collections or gardens, but Zwinger's point was that every example in his *Theatrum* would prove useful to someone, even if it seemed useless or excessively exotic to others. Zwinger thus presented his *Theatrum* as a public space in which readers with many backgrounds could all find something of use and which they should approach with respect for the diverse interests of others. With these analogies to gardens and fields Zwinger again glossed over the difference between God's creation and Zwinger's collections of examples of human behaviour which, he claimed with remarkable hubris, he hoped would rival the display of behaviours presented before God at the Last Judgement.²⁵

²² [*Q*]uod nulla est tam vilis herba, quae non praestantem aliquem in se contineat usum. Turpia et obscena multa congeruntur, non ut imitanda proponamus, sed ut ipsa turpitudine et infelicitate absterreamus non penitus malos. Zwinger (1586), sig. **4v.

²³ *Italo Italica, Germano Germanica, Scythae placent Scythica. Dum igitur omnium commodis consulimus, omnigena quoque colligenda fuere Exempla. Quae tu forte ut exotica aversaberis, alteri vel maxime arridebunt. Proinde e publico agro fruges aliis profuturas, tibi licet parum iucundas, extirpare noli: nisi forte tibi soli natos putas caeteros.* Zwinger (1586), sig. **3v.

²⁴ See the regulations of the public garden in Leiden (c. 1600), as quoted in Ogilvie (2006) 79–80.

²⁵ 'Thus, having brought together in one place all the actions and passions of all men who have lived from the beginning of the world to its end, we may be allowed to wish rather than to hope that this *Theatrum*, finally perfected, would resemble in some way that censorious display before the most just Judge' (*Ita quod tamen optare potius quam sperare licet, omnibus omnium hominum, qui a primo mundi ortu ad excidium usque vixerunt, actionibus et passionibus in unum collatis, perfectum demum et censoriae illius coram iustissimo Iudice panegyris aliqua ex parte aemulum foret Theatrum*): Zwinger (1586) sig. **3v.

‘No book so bad’ and variants were not unique to the Renaissance. In the twelfth century Hugh of St Victor made similar statements in his *Didascalicon* offering advice on preparing for biblical study: ‘learn everything, later you will see that nothing is superfluous’ and ‘hold no science to be vile, for all knowledge is good’.²⁶ In practice, that recommendation resulted in advice on studying the liberal arts to aid in reading the bible, not in an unusually massive or wide-ranging compilation. But among the medieval encyclopaedias there was one so massive that it was not surpassed in size until the late sixteenth century: the *Speculum maius* of Vincent of Beauvais (1255), totalling about 4.5 million words. Vincent was asked by his superiors in the Dominican order to write an ‘opus universale’ for the lectors who read to their fellows but often had no access to libraries.²⁷ The *Speculum maius* went through at least five different states, by successive enlargements (including a fourth part composed after Vincent’s death), and no doubt involved the work of a team of Dominicans who remained anonymous (like those who compiled one of the first biblical concordances around the same time).²⁸ Vincent announced the utility of his work for a whole range of pious activities:

But I am certain and trust in God, that this work is of no small use not only to me, but to every studious reader, not only to know God himself and his creatures visible and invisible, and through this knowledge to love God and to excite his heart to devotion by the sayings and examples of the charity of many doctors, but also to preach, to read, to dispute, to resolve and generally to explain clearly almost any kind of art.²⁹

Vincent’s *Speculum* clearly included much more than the average *lector* or preacher needed and was designed as a multi-purpose resource, ‘not only for the members of his order and those desirous of explicating the holy scriptures, or doctors, but also for others who perhaps out of some curiosity to know and laboring on things unknown to them, would be

²⁶ Hugh of St Victor (1961) 137 (6.3) and 96 (3.13).

²⁷ On Vincent’s institutional context, see Lusignan (1997).

²⁸ On the evolution of the text, see Paulmier-Foucart (2002) 245–6, 253; on the biblical concordances, see Rouse and Rouse (1974).

²⁹ *Certus sum enim, et confido in Domino, hoc ipsum opus non solum mihi, sed omni studiosae legenti non parum utilitatis afferre, non solum ad Deum per se, et creaturas visibiles et invisibiles cognoscendum, ac per hoc diligendum, et cor suum in devotione charitatis multorum doctorum ignitis sententijs et exemplis excitandum, verum ad praedicandum, ad legendum, ad disputandum, ad solvendum, necnon et generaliter ad unumquemque fere modum, et genus artis cuiuslibet clare explicandum*: Vincent de Beauvais (1624), prologue, ch. 4, col. 3.

pleased by the knowledge of such things.³⁰ But Vincent was mindful of the potential accusation of idle curiosity, which he acknowledged incurring, and insisted that ‘all the things which are contained in this work . . . are good in themselves and useful to the studious’.³¹

Although Vincent’s ambition was to offer encyclopaedic mastery of unprecedented scope, few medieval readers of the *Speculum maius* experienced its full extent. Research into the medieval reception of Vincent’s *Speculum* has turned up only two extant copies of the whole work, from a handful that were made in the Middle Ages. The *Speculum* circulated mostly in partial copies, three hundred of which are extant, most of which focused on one of the four parts, the *Speculum historiale*. But even the *Speculum historiale* survives in only thirty-seven complete copies. Given its massive size, the *Speculum* was prohibitively expensive to copy, except partially, in a manuscript culture. Printing was the key to its circulation as a single massive work, either as complete parts during the incunabular period, or a set of all four parts published in 1591 and 1624.³² But the material compiled by Vincent of Beauvais was also available in more portable and affordable encyclopaedic compilations. In particular the *Libri de proprietatibus*

³⁰ [D]um non solum nostris, id est fratribus ordinis nostri, hoc ipsum opus desiderantibus atque poscentibus, ceterisque sanctarum Scripturarum expositoribus, sive Doctoribus, verum etiam quibusdam alijs, qui forsitan curiositate quadam sciendi incognita laborantes, talium notitia delectantur, satisfacere volui: Vincent of Beauvais (1624), prologue, ch. 18, col. 15.

³¹ ‘I admit that to a great extent, in my judgement, I exceeded the method of the intention of my profession, especially in investigating and describing those things which are not named in the divine books. Therefore by acting curiously, I incurred the vice of curiosity. Indeed doctors promise what is appropriate to doctors, artisans deal with artisanal things. Thus I too, a small representative of a sublime profession, whose whole study and work must tend toward the salvation of souls, should have done so too in this work, especially on those matters which concern my profession. . . . Nonetheless concerning all the things which are contained in this work, I confess they displease me. Not because they are not good in themselves and useful to the studious, but because, as I said, it was not proper for my profession to insist so diligently on investigating and describing them.’ ([F]ateor ex magna parte, meo iudicio, professionis intentionis meae modum excessi, in illis praecipue investigandis ac describendis, quorum nomina in divinis libri non reperi. Itaque dum curiosi morem gere volui, vitium curiositatis incurri, Etenim quod Medicorum est, promittunt Medici, tractant fabrilia fabri. Sic et ego tam sublimis professionis homunculus, cuius, scilicet totum studium, et labor debet esse circa lucrum animarum intendere, etiam in hoc opere debui, praecipue de his quae ad professionem meam spectant [spectant sic] insistere. . . . Super omnia tamen quae continentur in hoc opere, mihi confiteor displicere. non quod illa quidem in se bona non sint, taliumque studiosis utilia, sed quia professionem meam (ut dixi) non decuit huiusmodi rebus investigandis ac describendis tam diligenter insistere): Vincent of Beauvais (1624), prologue, ch. 18, col. 15.

³² On the reception of Vincent of Beauvais, see Voorbij (1996) and (2000) and Guzman (1997). The *Speculum naturale* was printed at least in 1473, 1476, 1478, 1481 and 1494; the *Speculum morale* in 1476, 1477, 1485 and 1493; the *Speculum historiale* in 1473, 1474, 1483, 1494 and in French in 1495 and 1532; the *Speculum doctrinale* in 1477 and 1486. The *Speculum quadruplex* was printed in 1591 (Venice: D. Nicolinus) and in 1624 (Douai: Balthazar Beller).

by Bartholomaeus Anglicus (which had served as one of Vincent's sources) was widely copied in the Middle Ages, and printed nine times down to 1491 and in English as late as 1582.³³

What then (if anything) was new about Renaissance encyclopaedism? The innovations of the Renaissance involved a new scale of encyclopaedic activity rather than the development of a completely new practice: many more and much larger encyclopaedic compilations were printed in the Renaissance, with larger diffusions, than circulated in manuscript in the Middle Ages. The compilers also justified their work increasingly less defensively and with more exuberant pride than their medieval equivalents – compare Vincent of Beauvais' anxiety about seeming too curious, with Theodor Zwinger, of Last Judgement fame, who also addressed his work to the 'one and triune Lord' and commissioned a portrait of himself featuring the fall of Bellerophon, as if to allude to his own hubris.³⁴

We can get some unusual insight into the motivation for encyclopaedic accumulating from the biography by Pierre Gassendi of Nicolas Fabri de Peiresc (1580–1637), a learned nobleman from Aix who carried on a massive correspondence in the Republic of Letters and left a vast collection of manuscripts though he published nothing. In describing his working habits Gassendi offered an explanation of why Peiresc was 'most diligent' in recording 'any notable thing [that] came into his mind, or was suggested by some other or observed in reading': because he could 'never endure that the least invention or observation of any man should be lost, being alwayes in hopes that either himself, or some other, would be advantaged thereby'. Therefore 'he wrote things down in his memorials because he then judged they were out of danger of being forgotten'.³⁵ In this case the fear of loss and the conviction that every observation or thought was worth retaining both motivated Peiresc's obsessive stockpiling of information, gathered from his reading and experience, from his collections of medals and antiquities, and from the oral and written reports of others in letters and conversation.

The fear of loss, heightened by the keen awareness of the loss of ancient learning, was no doubt one factor motivating encyclopaedic stockpiling, even into the eighteenth century. Diderot advertised his *Encyclopédie* as

³³ Early editions include Basel, 1470; Lyon, 1480; Strasbourg, 1480, 1485, and 1491; Cologne, 1483; Nuremberg, 1483 and 1492; Heidelberg, 1488; Strasbourg, 1505; followed by six more editions down to 1609. See Bartholomaeus Anglicus (2007) 16. Translations include Spanish, trans. Vicente de Burgos, Toulouse, 1494; French, trans. Jean Corbichon, Lyon, 1491, Paris, 1510, 1522 and 1556; Dutch, Haarlem, 1485; English, trans. John Trevisa, Westminster, 1495, and London, 1535 and ed. Stephen Batman, London, 1582.

³⁴ The portrait is reproduced in Blair (2010) 201 and in color in Boerlin (1991) 45.

³⁵ Gassendi (1657) Book 6, 191–2, 200.

sufficient to restore learning if another great loss of learning should occur. Pliny's principle of 'no book so bad', which was often equated with the natural theological principle that apparently bad or useless species in nature served a higher purpose, was also used as an argument to motivate or at least justify encyclopaedism. Other causal factors probably included commercial printing, with its imperative to sell as many copies of a book as possible: a bigger book with more diverse content could be expected to appeal to more readers and sell better; hence the regular boasts on title pages that each compilation was 'bigger and better' than earlier ones (even when the claims were false).³⁶

I would venture that new motivations for reading also allowed for a broader range of acceptable reading material. Lucretius, for example, was valued as a model of Latin poetry and style and a source of unusual vocabulary in the sixteenth century, though his philosophical message was universally reviled.³⁷ While medieval florilegia invariably selected passages for moral edification, Renaissance commonplace books could select passages for their rhetorical or historical value (as in Zwinger who claimed that readers would derive good principles from bad examples). I certainly would not claim that reading books in parts was unique to the Renaissance, which produced bigger and better florilegia in direct continuity with medieval models in the genre, but whereas medieval florilegia rarely strayed from a narrow canon of Christian and philosophical authorities, Renaissance florilegia included many less authoritative sources – poets, emblems, fables and recent authors – as they expanded in almost every edition.³⁸ One printer of a much-enlarged edition of Nani's *Polyanthea* of 1585 emphasised that he selected only the good bits from his sources (subtext: even if they were not so authoritative), for 'as Pliny rightly said, there is no book which is not useful in some part'. In transmitting the useful parts from books ancient and modern for the greater good of society and posterity, his florilegium offered 'a pleasant and easy synopsis of all the sciences and disciplines, which will take you safely whether someone is looking for philosophy or medicine or theology or law'.³⁹ The principle of selective reading combined with

³⁶ For examples see Blair (2010) 53, 178–85; on boasts concerning indices see Blair (2000) 78. This dynamic toward heaping ever more examples and complexity has also been identified among classical manuals in astrology and physiognomics; see Barton (1994) 91–2, 204–5.

³⁷ See Palmer (2009).

³⁸ On medieval florilegia, see Munk Olsen (1979) and (1980), esp. 153–4.

³⁹ *Est enim omnium scientiarum ac disciplinarum iucunda admodum facilisque σύνοψις, sive quis Philosophiae ac Medicinae arcanis animum applicet, sive Theologiae ac iurisprudentiae quasi labyrinthis adjiciat, tutum ad eam receptum habebit: Polyanthea* (1585), sig. ()2r–v.

multiple criteria of utility for diverse readers further helped to authorise a more varied and broader collection of books.

The association of ‘encyclopaedia’ with encyclopaedism

Until 1630 only a handful of works featured ‘encyclopaedia’ in their title and none were clearly encyclopaedic. Some of these works are best understood as philosophical treatises on the relationships between the disciplines and referred to the first meaning of the new term in the sixteenth century. Joachim Ringelberg’s *Lucubrationes vel potius absolutissima kyklopaideia* (1538) and Paul Scalich’s *Encyclopaediae sive orbis disciplinarum . . . epistemon* (1559), for example, were short treatises meant to be read through (no indices or even division into chapters) and to move the reader toward a particular philosophical stance (in Scalich’s case, for example, a neoplatonic vision of the sciences as mysteries infused by God in men).⁴⁰ On the other hand, some works which used ‘(en)cyclopaedia’ as a subtitle were pedagogical and invited consultation. Among them, a 1583 edition of the *Margarita philosophica* first published in 1503 by the Carthusian monk Gregor Reisch (d. 1525) was subtitled ‘most perfect cyclopaedia of all the disciplines’. Printed in a 600-page quarto, the *Margarita* (‘Pearl’) presented a compendium of each of the liberal arts and of natural and moral philosophy, with a subsection on the mechanical arts, in a total of twelve books.⁴¹ The *Margarita* was equipped from the outset with an alphabetical index, table of contents and a clear layout of divisions and subdivisions, so that it could be both consulted punctually and browsed easily. Similarly, when the *Speculum maius* of Vincent of Beauvais was printed for the fourth and final time in 1624, by the Benedictines in Douai as a single massive folio in small type, it was sold under a rejuvenated title gathering many of the new metaphors associated with reference books: the *Library of the world, the four-fold mirror (natural, doctrinal, moral, historical), in which the history of all nature, the encyclopaedia of all the sciences, the treasury of moral philosophy, the vast theatre of the times and of human actions are exhibited*.⁴² The key terms ‘historia’, ‘encyclopaedia’, ‘thesaurus’ and ‘theatrum’ were

⁴⁰ Scalich (1559); for discussion see Serrai (1991) 87. ⁴¹ Reisch (1583); see Ferguson (1929).

⁴² *Bibliotheca mundi Vincentii Burgundi, ex ordine praedicatorum venerabilis episcopi Bellovacensis, speculum quadruplex, naturale, doctrinale, morale, historiale. In quo totius naturae Historia, omnium scientiarum Encyclopaedia, moralis philosophiae Thesaurus, temporum et actionum humanarum Theatrum amplissimum exhibetur*. Opera et studio theologorum Benedictinorum collegij Vedastini in alma Academia Duacensis (Douai: Baltazar Bellerus, 1624). Underlined words printed in red.

highlighted in red on the two-tone title page. Although it was only one of a number of metaphors, the encyclopaedia was associated here with a large-scale reference book.

Johann Heinrich Alsted's *Encyclopaedia septem tomis distincta* of 1630 was the first reference work to use 'encyclopaedia' as its title, without any qualifying or accompanying terms or metaphors. This four-volume work was an expensive folio, reprinted just once in 1649, but it was widely known if not owned (like Gesner's *Bibliotheca*) and was probably a catalyst for the increased use of 'encyclopaedia' in book titles. What Alsted offered as the model for the encyclopaedia, a century and a quarter after Reisch's *Margarita*, was a similar kind of organised compendium of all the disciplines, but on a much larger scale, with more detailed information for each discipline (including for example, under 'lexica', glossaries of major roots and terms in Hebrew, Chaldaic, Syriac, Arabic, Greek and Latin) and a vast number of new disciplines covered, many of them unique to Alsted's work. Alsted opted for an organisation of the sciences based on loosely Aristotelian distinctions between theoretical and practical philosophy. But Alsted ranged well beyond the usual disciplines, subdividing the mathematical disciplines for example not only into the traditional *quadrivium* of arithmetic, geometry, astronomy and music, but with equally ranked sections on cosmography, uranometry (devoted to the study of the size of the celestial sphere), geography and optics. Alsted coined many new terms in -logy to lend the authority of a name derived from Greek either to parts of traditional disciplines (thus stoecheiologia or mictologia as the study of elements and mixed bodies respectively) or to fields that Alsted defined in new ways. Alsted included a large tome for the mechanical arts, possibly inspired by the model of Zwinger's *Theatrum*, and a final tome covered in a medley or 'farrago' thirty-seven fields of Alsted's devising representing a broad range of philosophical positions and methods, from 'Mosaic physics' to Lullian mnemonics.⁴³ Without articulating it in those terms, Alsted clearly practised the variant on Pliny of 'no art or science so bad'.

Alsted's *Encyclopaedia* was true to the first meaning of 'encyclopaedia' by displaying the hierarchy and subdivisions of the disciplines in long branching diagrams clustered at the beginning of the work, and in shorter charts peppered occasionally throughout. At the same time, Alsted's *Encyclopaedia* was a large reference work, containing information in many areas and equipped with a clear layout and a single detailed index in which entries on a topic were grouped together and subdivided as in modern indices

⁴³ On Alsted's intellectual programme and context see Hotson (2000).

(and it was an early example of this format). The *Encyclopaedia* consisted of a compendium of textbook information on every discipline. Although Alsted did not often credit his sources and the borrowings are hard to detect, expert analysis has shown that Alsted composed the *Encyclopaedia* by relying heavily on some seventy-seven textbooks, many of them published by other Calvinist German academics like himself. These major sources were ‘broken down into thousands of tiny fragments and distributed throughout’ the work, while in a few specialised sections Alsted lifted or paraphrased extensively from a single source.⁴⁴

In explaining the origins of his work Alsted explained that he taught for twelve years an ‘Encyclopaedia of the philosophical course’ which he published in 1608 as a short survey of philosophy under that title. But ‘because great men requested it’ he included in this ‘complete Encyclopaedia’ the higher faculties, the mechanical arts and the farrago of disciplines, to embrace ‘in this volume the variety of all knowledge’. No mention of Pliny, but rather of his constant goals ‘to serve the good of others and amplify the glory of the one God.’⁴⁵ Alsted also concluded the treatment of most disciplines with a peroration lauding their contribution to the understanding and worship of God.

Alsted emphasised not the novelty of his project as much as the many models on which it drew, citing eighteen ‘great men who preceded him’ in the project of ‘delineating in one syntagma the great expanse of the philosophical kingdom’. Alsted’s list of those he viewed as his predecessors illustrates the wide range of contemporary notions of what constituted an encyclopaedic project.⁴⁶ The models Alsted cited include some classics of the historiography on early modern encyclopaedias, such as Ringelberg’s *Encyclopaedia* and Reisch’s *Margarita philosophica*, but also other works

⁴⁴ Hotson (2007), 212–13, and more generally 169–273.

⁴⁵ *Sic enim semper institui rationes meas, ut aliorum commodis inservire, ac unius Dei gloriam amplificare possem. . . . Deinde, quia viri magni petierunt, ut in secunda hac editione totam Encyclopaediam certa methodo comprehenderem, id est, tres superiores facultates, artes mechanicas, et farragines facultatum (ea enim omnia pertinent ad Encyclopaediam) adjungerem Encyclopaediae Philosophicae: Alsted (1989), I, sigs. iijv, iiijv.*

⁴⁶ *Quod ante me fecisse videbam viros omni exceptione majores, Fortium videl. Ringelbergium in Encyclopaedia, Hieronymum Cardanum in libris de Subtilitate, itemque de varietate rerum, Theodorum Zwingerum in Theatro vitae humanae, Petrum Ramum in Professione regia, Authorem margaritae philosophicae et Catenae scientiarum, Thomam Freigium in Paedagogo, Antonium Possevinum in Bibliotheca selecta, Gregorium Tholozanum in Syntaxi artis mirabilis, Cornelium Gemmam in Cyclognomicis, Jacobum Lorhardum in Heptade philosophica, Wowerium in Polymathia, Matthiam Martinium in Encyclopaedia, Bartholomaeum Keckermannum et Clementem Timplerum in variis Systematis, Robertum Flud in Macrocosmo et Microcosmo, Johannem Colle de Idea et theatro imitatricium et imitabilem ad omnes intellectus, facultates, scientias et artes: Alsted (1989), I, sigs. iiiv–iiijr.*

which do not figure even on the most expansive listing.⁴⁷ Alsted cited a number of works generated in the Calvinist German universities in which he spent his career, in particular various treatises each devoted to a single discipline, but which collectively formed an encyclopaedic project ('Clemens Timpler and Bartholomaeus Keckermann in their various systemata'), a Ramist textbook for children stripped to the barest collection of definitions in all fields (Thomas Freigius' *Paedagogus*) and a work on the 'idea of encyclopaedia' by his uncle Matthias Martini.⁴⁸ But Alsted's list also ranged among other persuasions and genres, from the Jesuit *Bibliotheca selecta* by Antonio Possevino, to Robert Fludd's esoteric *Macrocosmus et microcosmus* and from treatises on the question of the classification of knowledge and large compilations like Zwinger's *Theatrum* to entirely tabular presentations of the disciplines, like Jacob Lorhard's *Theatrum philosophicum*.⁴⁹

One of the works cited by Alsted, *De idea et theatro imitatricium et imitabilium* (1617) by Joannes Colle (1558–1631), professor of medicine at Padua, was couched as a *liber aulicus* (book for the court) and promised an introduction to Aristotelian philosophy for the benefit of princes and courtiers. Colle's work too opened with a long list of predecessors – twenty-three names, including some medieval, some Greek and many early modern authors.⁵⁰ Colle did not use the term 'encyclopaedia' and listed works not

⁴⁷ In his survey of Renaissance encyclopaedias Alfredo Serrai mentions some authors only because Alsted does without trying to place them in his discussion. See Serrai's treatment of Freigius, Keckermann, Timpler, Fludd (Serrai (1991) 122); Colle (Serrai (1988) 151 note 11); and Martini (Serrai (1991) 122). On Grégoire, see Serrai (1991) 92–6; on Cardano, Serrai (1988) 327–38; on Wower, Serrai (1988) 148, n. 9; on Cornelius Gemma, Serrai (1991) 91–2.

⁴⁸ See Johannes Thomas Freigius, *Paedagogus, hoc est libellus ostendens qua ratione prima artium initia pueris quam facillime tradi possint* (Basel: Henricpetri, 1582); Matthias Martini, *Idea methodica et brevis encyclopaediae* (Herborn: Corvinus, 1606).

⁴⁹ See Jacob Lorhard, *Theatrum philosophicum in quo artium ac disciplinarum philosophicarum plerarumque omnium . . . praecepta in perpetuis schematismis ac typis tanquam in speculo, cognoscenda obijciuntur* (Basel: Conrad Waldkirch, 1613) and *Ogdoas scholastica continens diagraphen typicam artium . . .* (Sankt Gallen: Straub, 1606). Alsted was probably misremembering the latter title as the 'heptas philosophica' to which he refers. Both of these works consist in a collection of charts of knowledge, one for each of the disciplines, paginated separately. The 1606 edition totals c. 380 pages; in the edition of 1613 Lorhard added charts for arithmetic, geometry and music for a total of 450 pages.

⁵⁰ *Eqque maiori conatu et animi candore, dum exacte depraehendisset, methodum omnium scientiarum Alberti Magni, Savonarolae, Iavelli, Hermolai Barbari, Hieronymi Bresciani, Theodori Merochitae, Georgij Pacmerij, Simphoriani Camperij, Pantaleonis Panvini, Iacobi Lorardi Diagraphem, Volaterranum, Dominicum Delfinum, Theatrum vitae humanae, Iacobum Fabrum, [Gregorii] Tolosani Sintaxim, Margaritam Philosophicam, Catenam scientiarum, Iulium Camillum, Ioannem Thomam Frigium (sic), Nicolaum Derbelli, Antonij Zara Anatomem, Theophilum Augustinianum, Fratrem Eustachium e Sancto Paulo et innumeros alios in ordinandis, aut methodo exponendis facultatibus, scientijs et artibus non parum a veritate discedere.* Colle (1618) sig. 3v.

mentioned by Alsted which focused on the mastery of Aristotle.⁵¹ Colle's list overlapped with Alsted's in five works which illustrate the full range of the notion of 'encyclopaedia' at the time: the tabular Lorhard, the massive Zwinger, the skeletal definitions of Freigius, Reisch's epitome of the disciplines and Pierre Grégoire's Lullian synthesis.

In these multiple acceptations of 'encyclopaedism' Alsted acknowledged both the classificatory and the accumulative aspects of 'encyclopaedia', but the impact of his *Encyclopaedia* increasingly moved the term 'encyclopaedia' away from questions of classification and toward encyclopaedic accumulation. During the following decades, the title 'encyclopaedia' appeared in more works that offered coverage, both on specialised topics and with a broad pedagogical spread.⁵² The specialised encyclopaedias especially signaled that 'encyclopaedia' designated bulk of knowledge rather than the interconnectedness of all disciplines. Alsted's *Encyclopaedia* also triggered the coining of the term 'encyclopaedist', by which John Evelyn referred

⁵¹ Since Colle does not offer any titles, I supply the specifics that he likely had in mind: Eustachius a Sancto Paulo, *Summa philosophiae quadripartita, de rebus dialecticis, moralibus, physicis et metaphysicis*, 2 vols (Paris: Carolus Chastellain, 1609); the shorter epitomes include Pantaleon Panvinus, *Syntaxis resolutoria pro unoque ab Aristot. considerato in Philosophia tam Naturali, quam Divina* (Trevisa: Aurelius Reghettinus, 1606); Hieronymus Savonarola, *Universae philosophiae epitome* (Wittenberg: Simon Gronenberg, 1596); Chrysostomus Iavellus, *Totius Rationalis, Naturalis, Divinae ac Moralis Philosophiae compendium* (Lyon: haeredes Iacobi Iunctae, 1568); Theodore Metaochita, *In Aristotelis physicorum, sive naturalium auscultationum libros octo* (Basel: per Nicolaum Bryling, 1559), translated from Greek; Georgius Pachymerius, *In Universam fere Aristotelis Philosophiam epitome* (Basel: Froben and Episcopius, 1560), translated from Greek; Ermolaus Barbarus, *Compendium scientiae naturalis, ex Aristotele* (Paris: Ioannes Roigny, 1547); Jacques Lefèvre d'Étaples, *Totius philosophiae naturalis paraphrases hoc sunt in opere contentae, quas Franciscus Vatablus non mediocri diligentia recognovit* (Lyon: Iacob Giuncti, 1536); Domenico Delfino [a Venetian nobleman], *Sommario di tutte le scienze* (Venice: F. Sansovino, 1568); Symphorien Champier, *De triplici disciplina* (1508); Volaterranus (Raffaello Maffei), *Commentariorum urbanorum* (1506 and 8 editions to 1603); Antonius Zara, Aquilensis, episcopus Petinensis, *Anatomia ingeniorum et scientiarum sectionibus quattuor comprehensa* (Venice: Ambrosii Dei et Fratrum, 1615). From Colle's list I have been unable to identify: Hieronymus Brescianus, Nicolaus Derbellus, Theophilus Augustinianus and the *catena scientiarum*, which appears in both Alsted's and Colle's lists juxtaposed with Reisch's *Margarita*. The concept of the 'chain of sciences' (*catena scientiarum*) was generally associated with Lullism, though it was not the title of a specific work; see Rossi (2006), 103 and *passim*. The closest title is the 'Catena aurea', a collection of patristic commentaries on the gospel devised by Thomas Aquinas, although this does not seem likely to be what Alsted had in mind.

⁵² Specialised works include Johann Philipp, *Encyclopaedia juris* (1640); Jacob Ravensperg, *Encyclopaedia mathematica* (1642); Johannes Dolaus, *Encyclopaedia chirurgica* (1689) and *Encyclopaedia medica* (1691). More general works include: *Encyclopédie des beaux-esprits* (Paris: Lamy, 1657 and 1659); Johannes Comenius, *Schola-ludus sive encyclopaedia viva* (1657); Johannes Gezellius, *Encyclopaedia synoptica . . . in usum iuventutis* (1672). But among the major reference works before the *Encyclopédie*, only Chambers used the term in the title; see Kafker (1981).

to Alsted in 1651. In 1681 Christian Liberius, author of an advice book about books, seeking to deny any accusation of having relied on compendia himself, referred to a number of the authors of reference books (including Zwinger, Rhodiginus, Alsted and Beyerlinck) as ‘encyclopaedists’.⁵³ Starting in the late eighteenth century, ‘encyclopaedist’ designated more specifically the authors of the collaborative work known as Diderot’s *Encyclopédie*.⁵⁴

The quest for the early modern encyclopaedia is plagued by the lack of a clear equivalent to our modern category before the eighteenth century, but also by the many distinct strands which even contemporaries identified as part of an encyclopaedic project. Authors of encyclopaedic works were torn between addressing theoretical issues about the proper hierarchy of the disciplines and the practical difficulties of making available large quantities of information. Alsted inaugurated the ‘encyclopaedia’ as the title of a large reference work, but the systematically arranged compilation of textbook material which he offered as an encyclopaedia remained without direct imitators. Instead, the proven commercial success of the alphabetical dictionary in the seventeenth century and the convenience of alphabetical order, both for users interested in consultation and for compilers with few philosophical pretensions, help to explain the rise of the dictionary of arts and sciences which gave the (en)cyclopaedia its form and subtitle in the dominant eighteenth-century exemplars of the genre: Ephraim Chambers’ *Cyclopaedia or an Universal Dictionary of Arts and Sciences* (1728) and Diderot and d’Alembert’s *Encyclopédie ou Dictionnaire raisonné des arts et sciences* (1751–75). The latter was first conceived as a French translation of Chambers, but soon mushroomed into a very different and much larger work.

The tensions in the early modern term ‘encyclopaedia’, which could designate both a classification of the disciplines or a bulk of useful information, did not disappear as the modern genre of the encyclopaedia solidified. Chambers boasted that his *Cyclopaedia* could be read through, starting with long, well-organised articles and moving on through cross-references to build knowledge of a whole discipline.⁵⁵ In his preliminary discourse to the *Encyclopédie*, d’Alembert apologised for the choice of alphabetical order

⁵³ Ex Zwingero, Rhodigino, Alstedio, Beyerlingio, aliisque tum Diaristis tum encyclopaedistis: Liberius (1681), sig. A2r. Caelius Rhodiginus, or Ludovico Ricchieri, was the author of a miscellaneously arranged reference book accessible by index which collected his learned observations on Latin language and culture; his *Lectiones antiquae* were printed in ten editions from 1516 to 1666.

⁵⁴ OED cites first Evelyn, *Memoires* (1651) in 1857 1, 278: ‘Curtius had been scholar to Alstedius the encyclopaedist.’ OED dates ‘encyclopaedist’ in the later sense to 1796 (Hutton). In current usage see Kafker (1988).

⁵⁵ Yeo (2000) and (2001).

and offered a tree of knowledge to compensate for the dismemberment of disciplines under alphabetical entries, while Diderot emphasised the utility of cross-references from which the reader could build many connections from one point of departure.⁵⁶ And the tension between classification and accumulation is still present in the 15th edition of the *Britannica*, which reserved separate parts for classification, short articles and long ones. But with Chambers and Diderot, and the many works that imitated them in the eighteenth century, the title ‘encyclopaedia’ promised above all a *copia* of information available for consultation. Classification of knowledge has occasionally surfaced as a topic in philosophy (with Auguste Comte for example), mostly without much impact on encyclopaedias. For example Coleridge’s plan for an innovative systematic arrangement for his *Encyclopaedia metropolitana* never came to fruition.

The encyclopaedic impulse central to the modern meaning of ‘encyclopaedia’ can be identified in many different contexts, with Pliny and Vincent of Beauvais as prime examples from premodern Europe, but also in rich encyclopaedic traditions outside Europe (the Chinese and Islamic traditions have received the most attention so far).⁵⁷ In Renaissance Europe encyclopaedic accumulation took on new proportions, in the scale of accumulation, the number of large compilations and the range of their diffusion through print. I have tried to identify some of the causal factors for this development, not only in the impact of textual, empirical and technological discoveries, but especially in a new concern to stockpile information from as many sources and disciplines as possible on the principle that, as in nature, in human inventions (books and the various arts and sciences) even the apparently useless can be valuable, if not for oneself then for others, either now or in the future. The keen awareness of the loss of ancient learning, a sense of contributing to a collective accumulation of knowledge to be transmitted to the future, and a general optimism about the value of knowledge, justified by comparison with natural theology, were the motivation commonly articulated by Renaissance encyclopaedists for the sleepless nights spent studying and the hard labour they invested in compiling notes and books on an unprecedented scale.

⁵⁶ D’Alembert (1995); Diderot and D’Alembert (1966) 642.

⁵⁷ For recent treatments of Islamic encyclopaedism, see Endress (2006a) and articles in Binkley (1997a); on China, Bretelle-Establat and Chemla (2007). Some discussion and further references also in Blair (2010) 22–33.

19 | Philosophy and the Renaissance encyclopaedia

Some observations

DANIEL ANDERSSON

Porphyry's *Introduction to Aristotle's 'Categories'*, at the very beginning of our instruction, makes much sounder suggestions, in claiming that universals are not corporeal but rather incorporeal, that they are not apparent to the senses but instead separate from specific objects. Mathematicians distinguish, as you know, physics and all the arts from the category of perceptible and specific objects, and they do not consider, when dealing with this or that triangle or square, whether it is made of iron or made of wood, but instead what its dimension is. The metaphysician barely descends below the level of the transcendentals. Thus the whole encyclopaedia weans us as it were from our earliest years, so that we adapt ourselves from those commonplace invisible things to the more sublime invisible things (ἀόρατα) of God.

We might note several things about the above extract from the sermon ('concio' is his word) that the estimable figure of John Prideaux, rector of Exeter College, Oxford, gave on Ash Wednesday, 1648, to an assemblage of Bachelors of Arts outside the 'Schools' building, in what is today the 'Old' Bodleian.¹ The Greek word ἀόρατα would have summoned the famous passage of Corinthians (1.16) about the visible and the invisible worlds. It is perhaps a sign, and perhaps not, that the highly emotional tone given to the discussions of educational reform by various spiritual reformers and radicals in seventeenth-century England had deeper roots in the university environment than is sometimes imagined. For the time being, however, I want to emphasise Prideaux's tight connection between encyclopaedia and curriculum. If Wikipedia is encyclopaedic, it would not count as an encyclopaedia in the Renaissance. The reason is its absence of disciplinary structure. In the Latin version of a work that is representative precisely because

¹ *Isagoge Porphyriana in vestibulo nostrae institutionis, saniora multò suggerit, Vniversalia scilicet non corporea esse sed incorporea, non sensibus obvia, sed à rebus singularibus avulsa. Abstrahunt (ut nostis) Physica & omnes artes à materia sensibili, & individuali, non cogitant Mathematici de subjecto hujus vel illius Trianguli, aut Quadrati, an ferreum sit, vel ligneum, sed cujus sit dimensionis. vix descendit Metaphysicus infra transcendentia. Ita ablactat nos quasi à cunis tota Encyclopaedia, ut ab invisibilibus istis trivialibus, ad ἀόρατα Dei sublimiora adaptaremur.* Prideaux (1648) p. 56.

it is unconcerned with the topic of encyclopaedias, the Salamanca-based professor Martin de Azpilcueta wrote, in an aside, of ‘the encyclopaedia of all disciplines’.² This confessor’s manual of moral (or ‘practical’) theology could count on an audience for whom this was an unproblematic statement. Azpilcueta was writing in 1568, and there was still a strong view connecting the various disciplines of the medieval curriculum with the much later notion of the ‘encyclopaedia’. The same is true of a scrap of evidence from England in the 1530s, one of the earliest usages of the word encyclopaedia I have found. It comes from the pen of the famed humanist Sir Thomas Elyot in his ‘Dictionary’. Sandwiched between *encumbomata* (a word for a young girl’s skirts) and *endelecheia* (the Aristotelian term) we read:

Encychos, & Encyclia,
the cyrkle or course of all doctrines.
Encyclopaedia,
that lernynge whiche comprehendeth all lyberall sciences & studies.³

The trace of the old scholastic university terminology in the word ‘course’ is evident, for the scholastics spoke readily of their ‘cursus’. Examples could be multiplied. Yet one does not perhaps sin unpardonably against historicity to suggest that there were often trends existing beneath the explicit theoretical formulations of encyclopaedism. Within the field of philosophy in the sixteenth century, one can note some of these trends, albeit that they have, at first, only a fairly marginal, and certainly poorly theorised, existence. Academics abhor (by which I mean love) a vacuum, however, and so into this gap have poured a number of important pieces of recent scholarship, and to these I now turn.

Many discussions found in the secondary literature on the topic of encyclopaedism start from the seventeenth century and look back into the sixteenth century with their eyes firmly still set on explaining the universalist tendencies of knowledge and knowledge organisation of the latter century. This article will be no exception to this approach, but I hope to take more seriously the explanatory autonomy of the sixteenth century. Certainly, the sixteenth-century roots of the seventeenth-century drive toward encyclopaedic visions of knowledge were many and various. When Francis Bacon advised Fulke Greville that the vastness of the realms of knowledge make abbreviations and epitomes a necessity, he invoked the practice of the commonplace book. It is noteworthy that for all the implications that commonplace book knowledge is shop-worn and second-hand, Bacon views the

² Azpilcueta (1583), p. 352. ³ Elyot (1538), sig. G3v.

process as constitutive of individual viewpoint.⁴ Drawing on such examples as these, it has been a frequent move in recent scholarship to see many aspects of the ‘new science’ as dependent upon certain humanist (or ‘literary’) techniques. This move has been associated with the names of Ann Blair, Ann Moss and Anthony Grafton, amongst others.⁵ Their approach has been very much rooted in the archival and pedagogic prescriptions of the humanists whose works they know so well. It belongs to a style of historiography that is regularly (and unfairly) characterised as empirical and Anglo-Saxon. Unfairly, because Grafton in particular is rooted in a tradition of Italian and German historiography that have a rather different version of ‘empirical’. One may choose to view the topic, however, through a different historiographical lens. At a more theoretical level, Grafton *et al.*’s attempt to look at the pedagogy of reading and writing represents an inflection of a recent drive within the seemingly distant field of epistemology. That drive, most marked in Germany, has been toward looking at the sociological conditions of knowledge and toward an examination of the historically specific procedures for proof of knowledge. This is not viewed as ‘mere’ sociology, but rather as part of philosophy. One fountainhead figure in this movement was Ludwig Fleck.⁶ Many have come in his wake to emphasise the role of the process and not the product, and indeed the historical and physical location of that process: the laboratory, the commonplace book or the social standing of the participants in the discursive community. This set of preoccupations has now solidified into a discipline of its own: historical epistemology.⁷

The application of this style of thinking to Renaissance intellectual history has mostly focused on the field of book history. One may see reasons why that is the case, since books are pre-eminently the forms of organisation of knowledge that are most clearly instrumental. Too rigid a focus on book history and reading practices has, however (at least in the Anglophone scholarly world), obscured other relevant ‘proto-encyclopaedic’ drives in the intellectual culture of sixteenth-century Europe.⁸ It is the purpose of the present piece to suggest some other non-book history factors in the fashioning of this drive. Here, however, a word of method is perhaps apposite. Already there is something wrong with the ascription of organicist agency in the phrase ‘encyclopaedic drive’, but it will stand as a device of purely heuristic

⁴ Francis Bacon (in persona of the Earl of Essex), ‘Advice to Fulke Greville on his Studies’, in Bacon (1992) 102–6.

⁵ See Blair (1992); Grafton (1985); Moss (1996). ⁶ Fleck (1980).

⁷ The Max Planck Institute for the History of Science has been seminal in the field of ‘historical epistemology’: see Rheinberger (2007).

⁸ For one recent contribution along these lines, see Enenkel and Neuber (2005).

convenience. There are encyclopaedias, each with its very separate printing history and reception. However, this talk of drives is a useful short-cut to understand the vogue for the works of such canonical and pansophical compendia as Jan Amos Comenius, or some members of the Hartlib circle or still more radical figures such as the mid-century English antinomians. It will be helpful to look beyond the explicit and obvious sources and consider the ways in which the contours of knowledge had already – in some quarters – been shifting toward a single method or vantage point.

In the short time since the conference from which the current volume derives took place, questions of curricula and disciplinarity have shot to the fore of Renaissance intellectual fashion. Knowledge has acquired the status that ‘materiality’ or ‘coterie’ once had. Like many revolutions, this current fashion is at times unaware of its own past. I want to make a plea here for the continuing relevance of some older work. One approach to the study of the fashioning of such a ‘single’ vantage point has been the *artes historiae*. The growth of the discipline of history within the intellectual life of the Renaissance has been singled out in a famous article by Donald Kelley as an important element in the ‘road from Vincent of Beauvais’ *Speculum mundi* to Diderot’s *Encyclopédie*.⁹ Kelley’s article is in fact a synthesis of various strands of earlier German scholarship, mostly deriving from the *Geistesgeschichte* tradition of intellectual history: there are signal contributions to that tradition by Wilhelm Schmitt-Biggeman, Ulrich Dierse and an author whom Kelley omits, Arno Seifert.¹⁰ Seifert in particular was influential on an entire generation of scholars, who have laid the foundations for today’s work on knowledge and disciplinarity, and he in turn relied on an older historiography. Kelley locates within humanistic legal and philological studies the crucial impetus toward historicism that would transform history from mere ‘narrative description’ to something more akin to its original meaning in Greek, ‘enquiry’ or ‘process of discovery’. The increasing emphasis upon the validity of natural particulars, opposed to the essentialist model of Aristotelian epistemology, allowed history to flourish and to become less simply one discipline among many than a *prima inter impares* intellectual approach, or (to adopt the more grandiose terminology of Arno Seifert) a mode of cognition (we will see a parallel, in a moment, with the history of logic). As Kelley sees it, there is an alliance between this historicism and the encyclopaedia. There is a notable absence, however, from both Kelley’s account and those of Grafton and Blair: the discourse

⁹ Kelley (1991) 7.

¹⁰ Schmidt-Biggeman (1983), together with the review by Schmitt (1985); Seifert (1976).

of philosophy. What I would like to do here is to sketch certain developments in philosophical writing of the Renaissance (briefly, status of logic, syncretic/historical character, humanist emphasis on individual words and consistency of terms within and between texts) that are equally plausible ‘alliances’, recognising all the while the nest of evidential vipers that the word ‘alliance’ conceals.

It will be as well first to contrast this movement toward a signal unified perspective or method with the curricular democracy of the late medieval encyclopaedia, albeit that medievalists will rightly contest their period being used simply as an uncomplicated foil for the more ‘sophisticated’ Renaissance. Indeed, the dynamics, in particular visual and material, of how knowledge is passed from one encyclopaedia to another in the Middle Ages are a more complicated affair than I am suggesting, for the purposes of speed, here.¹¹ The term ‘encyclopaedia’ refers to a body of knowledge and hence, indirectly, to an organisational principle closely related to an educational curriculum. Ever since the work of Curtius, this view of the encyclopaedia as a physical instantiation or expression of a particular pedagogical practice has been influential.¹² Subtending from this analysis is the study of the organisation of libraries as an even more physical such instantiation, to which, for the Renaissance period, Helmut Zedelmeier has made a distinguished contribution.¹³ The obvious principle of organisation for the late medieval and Renaissance period was the arts course, that bastard son of the late antique *trivium* and *quadrivium*. In antiquity, Varro’s *Disciplines* represents the oldest example of this connection between instruction and treatment, with other works such as Pliny’s *Natural History* appearing less closely connected and rather more concerned to give an account of the ‘units of creation’: a tension, in other words, between the world as given and the world as intellectual construct.¹⁴ The two strands, after the fall of the Roman empire, mingled and grew in different ways, though, to simplify greatly, the Renaissance saw an increased interest in the intellectual problems of classification drawn from the notion of a cycle of knowledge at the expense of the world as given or ‘units of creation’ approach. The most famous example of an encyclopaedia from the high Middle Ages saw this latter approach flourish, but with a twist, in the divisions into natural, ethical, doctrinal and historical sections adopted by Vincent of Beauvais or the similarly themed *De proprietatibus rerum* of Bartholomaeus Anglicus

¹¹ See Vorholt (2007). ¹² E. R. Curtius, ‘Das Buch als Symbol’, in Curtius (1948) 307–52.

¹³ See his ‘Grammatik und Philologie als enzyklopaedische Wissenschaften’, in Zedelmaier (1992) 265–85.

¹⁴ The phrase the ‘units of creation’ comes from the helpful overview of Albrecht (2000) 47 n. 3.

(though this was as late as 1470): these naturally had connections with the instruction of their time but they did not take joy in the explicit connection between the cycle of disciplines and the organisation of the text. Gregor Reisch's immensely widely diffused compendium of knowledge, the *Margarita philosophica*, first published in 1496, marks an important shift in emphasis. For one example of the wide iconographic diffusion of this work, we can advert to the reproduction of Reisch's frontispiece, embodying the various disciplines (Figure 2), in a later English work, Stephen Hawes' *The Pastime of Pleasure*.¹⁵

Changes were, however, afoot.¹⁶ The growth of humanism made various changes to this curricular structure, notably a greater emphasis on the 'knowledge' conferred by the literary disciplines. Almost contemporaneous with Reisch is the markedly more humanist compendium of Giorgio Valla, published posthumously in 1501, a work which combines (as Peter Burke has already noted) the fashionable practices of poetry, ethics and history with the *trivium*.¹⁷ The increasing sense in which grammar and philology, those canonically humanist disciplines, came to be viewed as keys to the door of the system of knowledge has been emphasised by Zedelmeier. It is here that we see the relevance of the shifting iconography of the organisation of knowledge away from a static model of the *trivium* and *quadrivium*. The real challenge of humanism to the medieval curriculum was not so much in the addition of new fields of knowledge as in the awareness of a new style of enquiry, the comparative and philological mode of approaching texts. The fashion for the explication of rare words is another pronounced feature of the humanist obsession with style, and found itself at ease with the alphabetical model or organisation, familiar from the *Souda*, that can be seen in such works as Ambrosius Calepinus' *Dictionarium*.¹⁸ This was another way of splitting up the static structure of knowledge into a focus on lexical particularities that, though seemingly rather different from the encyclopaedism with which we are mainly concerned, nonetheless has an impact on the increased awareness of the sprawling and messy nature of previous attempts at comprehending intellectual enquiry. The most important figure in this line of philosophical enquiry was of course Rudolph Goclenius, but behind him was a certain tradition of humanist exegesis attentive to the

¹⁵ See Mead (1928), esp. l–lxvii, for a discussion of the sources, textual and visual, for the medieval arts course background of the work. For a detailed study of the *Margarita*, see now Andreini (1997).

¹⁶ For a slightly different view of this material, see West (2002) 22–8. ¹⁷ Burke (2000) 94.

¹⁸ Calepinus (1519). For the sixteenth-century growth in these dictionaries, which contained much crossover material with the 'encyclopaedia', see now Tonelli (2006).



Fig. 2 Frontispiece to Gregor Reisch's *Margarita philosophica*, 2nd edition, 1554 (Freiburg?: Johannes Schottus) (University of Iowa John Martin Rare Book Room, Hardin Library for the Health Sciences).

texture of words which found immediate fruit in the philosophical dictionaries that preceded Goclenius, such as those of Marc-Antonio Zimara and of Bernandi, a tradition that we will deal with later with reference to the influence of Simplicius.

This essay takes a wide scope, and has moved fairly briskly over some of the debates in the field. Perhaps it is now time to change pace and style. Let me now give an example of the way in which this humanist taste for historicisation, linked inevitably to the attempt to understand an increasing array of sources, ancient and modern, encouraged a reorganisation of the field of Renaissance knowledge. The example is from Michael Neander's *Physicae*.¹⁹ After a school education in Joachimstal, Neander moved to Wittenberg. Born in 1529, his sylloge, which I am here calling *Physicae*, was a work towards the end of his life, following an education not only in the Melancthonian arts course of Wittenberg, but also medicine. It presents itself as an encyclopaedic treatment of the knowledge required to understand the human body and its ailments; it is in other words a medical 'encyclopaedia'. Yet even the preface, which takes seriously its attempt to locate medical knowledge within the context of a humanist programme of erudition, signals the difficulties that Neander has with this attempt, due to the sudden profusion of new animals and plants (Bezar, Sasafras, Sasparillo) brought in from the New World. These are no longer presented, as in the older medieval bestiary tradition, as being strange and wonderful; they are both problems for the organisation of his book, and selling-points. The end of the first half of the work descends into a list of 'natural particulars' of animals, plants and anecdotes from the recent past: it is the book's attempt to accommodate the varieties of 'historia'. There is an inevitable tension between this expansive attempt to capture particularity and the tauter underlying conceptual curricular structure of the work. In the long poem that heads the second book of Neander's work, penned by Laurentius Rhodomannus, we see the attempt to locate once again the mass of knowledge into a clear encyclical structure, but Rhodomannus attempts to incorporate the knowledge of the past of the early church and of biblical chronology as the final culminating context for this knowledge. Neander was himself interested in the problem of biblical chronology and indeed produced an encyclopaedia of biblical history, which provides something of an explanation for Rhodomannus' poem.

There is then a clear need for the encyclopaedia's structure not to be lost in the welter of new (or more philologically accurate) data. If Neander

¹⁹ Neander (1585).

starts, in his first book, from natural philosophical principles, then goes on to describe the workings and functions of the human body and illness, and the relative merits of different cures, it is important to understand that this natural philosophical basis remains the ordering criterion. The last, and explicitly culminating, section of Neander's *Physicae* deals with the 'anima' which is described as the other part of the 'form' or 'substance' of the human being.²⁰ It reasserts the natural philosophical impetus of the work, by which I mean the attempt to posit underlying principles which are causally related to their properties. Furthermore, this natural philosophy is contextualised with reference to a particular religious attitude (the need for humility in the face of the certainty of a coming Last Judgement).²¹ One is reminded of the close of Vives' *De anima*, in effect a religious paean to the benefits of spiritual and intellectual humility.²² This tension between the logical or curricular structure and the attempt to accommodate, under the influence of humanism's historicisation and the discoveries of recent intellectuals and travellers, is hardly confined to Neander. Despite the seeming continuity of a curricular organisation in one seventeenth-century Italian translation and expansion of Reisch's *Margarita philosophica*, the mass of additional fields or subfields of study makes it much harder to discern the underlying skeleton.²³ It was, *inter alia*, these difficulties that prompted the diffusion of a larger number of alternative organisational principles for knowledge in the later sixteenth and early seventeenth centuries, about which much has already been written. It was not merely the addition of the humanist grammatical disciplines that changed the organisation of knowledge in the early modern encyclopaedia: the growth of a space within knowledge for the 'artes mechanicae' has been charted in an interesting article by Christel Meier.²⁴

We should not, however, confine our attention to works traditionally described as dictionaries or encyclopaedias to understand the encyclopaedic drive. Internal to commentaries and textbooks by which Renaissance philosophers and exegetes promoted their discipline were some key 'encyclopaedic' traits. I have already mentioned the humanist taste for exegesis of particular lexical items and its impact on dictionaries and the late medieval presuppositions of knowledge. The genre in which this mode of attention to texts was most pronounced was the humanist commentary.²⁵

²⁰ Sigs Cc7v – MM5r. ²¹ sigs. LL6v – MM5r. ²² See further Andersson (2010).

²³ Reisch (1600). ²⁴ Meier (1995).

²⁵ For a slightly different view of this relation, see Chines (1998), esp. 13–14: 'Le postille possono così contenere *notabilia* che riassumo sinteticamente i dati contenuti nel testo (a), semplici rimandi interni (b), approfondimenti esegetici del testo (c), integrazioni e riferimenti ad altre

The rapid expansion of this genre within the field that was canonically about the interrelation of concepts, namely philosophy, should be given due weight. The careful exegesis of words, and the attempt to align conceptual clarity to a given technical vocabulary, were issues which much preoccupied humanists at the end of the Quattrocento until the latter part of the sixteenth century. The texts of Aristotle, known almost in their entirety to western Europe in Latin translations of Arabic and sometimes Hebrew versions of the Greek originals (or occasionally through Syriac versions), formed by the early thirteenth century the foundation of the university curriculum. There were, of course, earlier retranslations of Aristotle's works by scholars such as James of Venice, Burgundio of Pisa and William of Morbecke; Toledo also became a great translation centre in the twelfth century and (with Michael Scot) the early thirteenth century. The increasing philological sophistication, however, of the Renaissance, with the discovery of Greek manuscripts, a better grasp among the humanists of the Greek language and the better dissemination of such problems through the advent of printing, meant that the end of the fifteenth century, and above all the sixteenth century, saw an unprecedented attempt to understand these texts in all of their lexical specificity, which threw up related issues such as lexical consistency across and within given works of Aristotle. It became clear that Aristotle's dense mode of expression, together with the vagaries of the manuscript tradition, had resulted in many errors creeping into his works.

Particularly important was the republication of Simplicius, the Greek commentator on Aristotle's works. Simplicius was attentive to such issues as internal consistency and the organisation of books, and enjoys much cross-referencing between the works.²⁶ It is no surprise that he was enthusiastically taken up by that most 'humanist' of Aristotelian commentators, Francesco Vimercati.²⁷ The interest in such questions as the correct ordering of books within Aristotle was to resurface elsewhere. Ermolao Barbaro's compendium of Aristotelian science deals with the question.²⁸ Its preface itself owes something to the work of the Paduan academic Franciscus

fonte (d), forme di attualizzazione del testo tramite la comparazione con opinioni moderne o aggiornamento di definizioni geografiche o di nomi di pesi e misuri (e), aggiunte di exempla di sostegno o di smentita a quelli presenti nel testo (f), citazione di concordanze con altri testi, per lo più nella forma di loci similes'. For a complete statement of the philosophical practice of Simplicius, see now Baltussen (2008).

²⁶ See for example his discussion of the opening of Book 6 of the *Physics*, with its extensive quotations from other bits of the Aristotelian corpus in order to ascertain what the authentic book division was: Simplicius in Konstan (1989) 15–16.

²⁷ Compare the opening of Vimercati's commentary on Book 6 of the *Physics* with that of Simplicius.

²⁸ Barbaro (1552), sigs. Z1^r-F3^v.

Caballus (1450–1510), who published a similar account at the end of the fifteenth century.²⁹ It is an obvious by-product of the increasing number of translations of the *Physics* (as of other works in the Aristotelian corpus) that began to become available in the sixteenth century, that issues of the correct rendering of particular words rather than exegesis of the overall argument in a given passage would come to the fore. This was a symptom of, and springboard for, the development of the more rigorously philological approach to the text of the *Physics* that finds its sixteenth-century peak in Julius Pacius and Isaac Casaubon. Périon's work on Aristotle's *De natura* is a good example. In this instance, the impetus was polemical, in that Périon is responding to an attack on his translation methods by the French humanist and translator of Aristotle, Iacobus Lodovicus Strebaeus.³⁰ His notes are detailed and intelligent.³¹ This sort of mix of philological and philosophical discussion is found for the first time in other texts at about this time.³²

This division (or destruction) of a philosophical text into its tiniest items, its words, has obvious connections with the growth of the alphabeticised subject dictionary, itself a subgenre of encyclopaedias. After all, there is an inherent tension in the notion of an encyclopaedia in that it both attempts to provide a full account of knowledge but also to compact such knowledge: these twin drives of expansion and compaction may be seen in the philosophical commentary. The impulse toward lexical elucidation, seen in the commentary and the tradition of the philological lemma, and manifested elsewhere in such things as translation disputes, was matched by a contrasting impetus in the history of Renaissance philosophy. The second area that has been traditionally of concern to historians of philosophy but that is also relevant to encyclopaedism is the Renaissance development of the notion of a conceptual system, in particular of a 'system' of philosophy.³³ In contrast to the approach that emphasises the lexical particulars, this suggested the importance of the underlying structure between interlinked disciplines of knowledge. In a lucid and groundbreaking study much relied on by later scholars, Otto Ritschl noted this development and signalled Philip Melanchthon as the first figure.³⁴ Ritschl's approach was to look first for instances of the word 'systema' in the sixteenth century. Whereas the

²⁹ Caballus (1499). For the preface see Aristotle, *De natura*, sigs. a5^r–8^v.

³⁰ Mention of Strebaeus at, e.g., Perionius (1552) sig. t2^v.

³¹ E.g., see Perionius (1552) sigs. q8^v–r1^r.

³² Let me single out the commentary on the *Nicomachean Ethics* prepared by Marc Antoine Muret (1789).

³³ The most philosophically literate, though sometimes slightly unhistorical, contribution is Vasoli (1978).

³⁴ Ritschl (1906), esp. 10. See also Catana (2005) 72–90.

(according to Ritschl, especially Stoic) sources presented the word above all as a system for a particular field of knowledge, he found that there was a tendency to make the word bear a more 'instrumental' or 'methodological' meaning.³⁵ In one passage, Melanchthon refers to the various disciplines of the *quadrivium* as a system and similarly in Melanchthon's 1534 preface to his edition of the *De officiis* of Cicero, he wrote:

Never do they achieve a rounded knowledge, whose zeal does not attend to the fixed end of their studies, and they roam about all over the place without reason or order through the various disciplines. Skill is a combination [= system] of knowledges gathered up toward some purpose useful for the things of life.³⁶

For Melanchthon, that 'fixed end' was as much a matter of ethics and religion as it was a purely intellectual goal, though this aspect was not always picked up by later writers (such as Ramus). Ritschl himself explicitly signalled that he was relying on earlier work on the history of logic (nineteenth-century Germany being the great period and area for such study), in particular Max Heinze, whom he cites in relation to Ramus.³⁷

Although twentieth-century historians of logic have emphasised the purely pedagogic or pragmatic value of the Ramist vogue for a single unified method, Ritschl tells a story in which it had a loftier conceptual origin. Ritschl is careful to emphasise that the drive is pronounced even earlier in the discourse of theology than philosophy, noting that one would look in vain for illumination on the notion of system from Rudolph Goclenius' 1613 *Lexicon philosophicum*.³⁸

It is not surprising, given the story of the Renaissance transformation of logic from being simply one discipline among many to the key discipline by which other fields of knowledge may be assessed, that by the first decade of the seventeenth century we find the notion of 'system of philosophy' most clearly detailed in a work of logic. Although there were at least four views of the status of the 'art' or 'science' of logic in the sixteenth century, and although there are medieval precedents for this more

³⁵ Ritschl (1906) 8–9: 'Das Wort System erscheint seit dem Beginn des 17. Jahrhundert als ein Lieblingsausdruck der Philosophen und Theologen, der dan aber bald in allen Wissendisziplinen Eingang fand.'

³⁶ Melanchthon (1534) 257: *Nunquam perfectam doctrinam consequuntur isti, quorum animus non prospicit certum finem studiorum, et vagantur temere ac sine ordine ac ratione per varias disciplinas*. This is followed by some Greek words, which are in fact a citation, as Ritschl saw, from Lucian, *De parasito*, 4. He continues (Ritschl (1906) 10): 'Ja, Melanchthon selbst ist es überhaupt noch nicht wichtig gewesen, dass Lucian die Kunst gerade als encyclopadian bezeichnet hatte. Vielmehr kam es ihm nur erst auf den Zweck und den Nutzen der Studien an, auf die er in jenem Satze eine nachdrückliche Hinweisung gegeben sah.'

³⁷ Ritschl (1906) 9, citing Ueberweg (1896) vol. 3, 95. ³⁸ Ritschl (1906) 18–24.

instrumental view of logic, this does represent one noticeable Renaissance trend.³⁹ The German writer, Bartholomaeus Keckermann (1571–1608), not only provided an early theoretical formulation of this ‘instrumentalisation’ of the idea of system, but was also undoubtedly the one who did most to popularise it, so widely diffused across all of northern Europe were his works.⁴⁰ His influence was strong everywhere, though England and Germany appear to have been particularly important loci. Keckermann was a pupil of Fabricius and then passed through various German universities, including significantly Melancthon’s Wittenberg, studying both philosophy and theology. The theological underpinning of Keckermann’s works is strong though it was easily possible for later writers to emphasise the purely ‘logical’ or ‘methodological’ aspects instead. *Nil de nihilo*, of course, and scholars have emphasised the importance of the Paduan philosopher Jacopo Zabarella on Keckermann and indeed the German university environment as a whole, but at least as far as ‘system’ and its connection with encyclopaedism is concerned, Keckermann remains the key figure. Keckermann’s systematic ‘reductions’ of the disciplines into their various logical constituents (which, as Vasoli emphasised, have both a topical, dispositive and mnemonic function) were ‘developed at length above all in the *Systema Systematicum* in which Alsted collected the philosophical work of his colleague from Danzig after his death.’⁴¹ It is impossible not to see connections between this and Alsted’s own conceptual (and visual) arrangements of knowledge in his *Encyclopaedia*. The logical structure, which as recent scholarship has emphasised may be seen as serving clear pedagogical ends, nonetheless lends itself to a certain logical manner of proceeding. The close connection between logic and metaphysics has suggested another principle of organisation of encyclopaedic knowledge. Ulrich G. Leinsle has written of the metaphysical underpinnings of the knowledge classification system of the German philosopher Clemens Timpler (1563/4–1626): in essence, he attempts to answer the question: ‘Was ist die Grundlage der Enkylopaedie: die Metaphysik (als Ontologie) oder eine wissenschaftstheoretische Disziplin oder nur ein topisches Ordnungsmuster?’ (‘What is the

³⁹ For some medieval Hebrew precedents, see Manekin (2000) esp. 278–9; in the same book Melamed (2000) 443 suggests that the Italian Jewish scholars also emphasised the curricular structure of knowledge for their works, in a similar fashion to the Latin encyclopaedias with which I am here concerned.

⁴⁰ See, above all, Vasoli (1983) and (1984). I have missed reference to these articles in Hotson (2000), which is otherwise fairly comprehensive (to be fair, Hotson correctly argues against any simplistic reduction of Alsted’s work to a logical/methodological label such as Ramist).

⁴¹ Vasoli (1983) 98: ‘ampiamente sviluppati soprattutto nel *Systema Systematum* ove lo Alsted raccolse, dopo la morte, le opere filosofiche del collega di Danzica’.

basis of the encyclopaedia: a metaphysical (that is to say, ontological) one, a “knowledge-theoretical” discipline, or a mere principle of method and organisation?”⁴² Although this is obviously an important ‘embedded’ question in any classificatory system that draws on a logical arrangement for knowledge, it was only with the increasing taste for metaphysics, and the fact that topical arrangement whether drawn from humanist dialectic or Ramist division came to be seen as intellectually nugatory or old-fashioned, that this was given explicit treatment.

I have said before that just as Donald Kelley saw history move in the encyclopaedia from being simply one discipline among many to a sort of guiding cognitive mode, so we may see logic, or at least certain stories of the increasing instrumentalisation of that discipline, as playing a similar role in the development of the encyclopaedia. That story I looked at through the prism of the concept of ‘system’, but in a pleasing vignette from Keckermann himself on the ‘history of logic’ we see how these two concepts ‘historicism’ and ‘instrumental logical system’ cannot be kept in watertight compartments. This fable leads me on to the other key element in Renaissance philosophy with an impact on the encyclopaedia, its syncretic character. This too may be laid partially at the feet of Simplicius, who attempted to bring together as far as he could the philosophies of Plato and Aristotle. Other philosophers such as Jacques Charpentier and Sebastian Fox-Morzilla were also concerned to smooth away the differences between these two figures (drawing on an already well-established tradition). This syncretic drive was an almost inevitable consequence of the increasing historical awareness of the development of the history of philosophy in antiquity and beyond.

The impact of humanism on philosophy contained two antagonistic impulses. The first may be called ‘rhetorical’ and emphasised the production of a single persuasive discourse about the natural world. It took its bearings both from particular pedagogic practices within universities and also from the dissemination of such works as the paraphrases of Themistius and Jacques Lefèvre d’Etaples. It is one aspect of the broader humanist phenomenon of the rewriting of texts into more user-friendly formats. It could be carried quite a way from its pedagogic origins; the finest example known to me is the vernacular versification of the *Physics* by Paolo del Rosso.⁴³ It is important not to lose sight of the stylistic influences upon such texts if we

⁴² Leinsle (1995) 99, and in general 99–102. Leinsle’s study draws on his earlier work: Leinsle (1985) 352–69. A clear account of the connections between Timpler and Keckermann would be a useful scholarly synkrisis.

⁴³ del Rosso (1578). This work was originally composed in 1553 by the Italian litterateur during his period of exile in France: see Simoncelli (1990) and Plaisance (1991).

are to maintain, with any credibility, this classification as humanist.⁴⁴ Particular historical factors, of which humanism is only one, albeit an important one, help to give some sense to the taxonomy, and style is chief among these. The second impulse within humanism that I wish to isolate here may be called ‘philological’: this is the impulse that I have dealt with earlier on in my consideration of the importance of Simplicius and the line of commentary discussion that related the philological to the philosophical. It started from an increased awareness of the corpus of *libri naturales* as a series of philological and, on occasion, emendatory difficulties, along with problems of consistency between parts of the *Physics* and, indeed, between the *Physics* and other works, both Aristotelian and non-Aristotelian. It also reflects the growth of the historical awareness of philosophy as a discipline. This philological and historical approach to the text tended to segment the corpus into discrete units and hence pulled in an opposite direction to the ‘rhetorical’ one.⁴⁵ These are exaggerations, but they are worth making.

Eckhard Kessler has written suggestively, if not yet fully persuasively, of the connections between sixteenth-century *Methodenlehre* and the establishment of psychology as a discipline with its notion of the mind’s knowledge of itself.⁴⁶ To repeat, a closely related development took place within the field of logic, about whose status considerable controversy arose in the Renaissance. A line of development from Melanchthon through Ramus and then on to Keckermann established logic not so much (and here there is a close parallel with the change in *historia* that scholars such as Seifert have adumbrated) as a field of knowledge, as providing either a glimpse into the structure of the mind itself or being a template for a particular way of achieving systematic knowledge. The seventeenth-century confidence (seen in Bacon, Descartes, Locke and the other *lumières*) not only in the idea of a method extractable from facts or observations, but also (and conversely) in the idea of the fact in some way capable of floating free from its ‘theory’ (to use modern terminology), is a signal aspect of the intellectual *Unterbau* of the scientific revolution. These ideas are also implicit in the philosophical roots of the development of its encyclopaedists.

⁴⁴ For the position of d’Etaples, see Kessler (2002).

⁴⁵ One interesting development in the history of the text of Aristotle that has not, to my knowledge, received due attention is the shift from the system of paragraph division derived from the Arabic texts, represented in the west by the text used with the commentary of Averroes, and the growth, sponsored by the ‘humanist’ commentaries and translations, of a different division system (although the former did not die out for a long time, being used by, for example, Zabarella).

⁴⁶ Kessler (1987). The much-expected book of Richard Serjeantson may tell us in more detail whether, in what way, when and how this move is replicated in England.

Whilst each of these aspects of Renaissance philosophy (a historically informed syncretism, an expansive approach on individual words, the renewed interest in the status of logical structure, the desire to reformat the works of Aristotle into more user-friendly styles) is suggestive of trends observable in the encyclopaedias of the seventeenth century, the nature of the connections is implicit and embedded. There is, in other words, no smoking gun. The nature, moreover, of some connections in the history of ideas will always remain at the level of structural homology because the connections were not themselves actor-categories. Here looms a host of larger issues about anachronism in intellectual history, which I do not propose to deal with. To invoke a logical technique much disputed in antiquity and the Renaissance – the *sorites* – we will close by noting merely that at some point the individual grains of philosophical discourse do appear to become an encyclopaedic heap. At quite what point remains a subject for historical research. The current essay has simply wanted to frame the debate and the direction of travel of any such research. I hope at least to have shown that when the history of the Renaissance encyclopaedic ‘drive’ comes finally to be written, much of its source material will be found outside of the encyclopaedia.

20 | Reading ‘Pliny’s ape’ in the Renaissance

The *Polyhistor* of Caius Julius Solinus in the first century of print

PAUL DOVER

Among the incunabula in the rare book collection of Princeton University’s Firestone Library is a copy of the *Polyhistor*, by the fourth-century geographer, naturalist and encyclopaedic compiler Caius Iulius Solinus. Dated 1480, this book, from the printshop of Andrea Portilia in Parma, belonged at one point to the Neapolitan humanist Julio Pomponio Leto, famous for his alleged role in the plot of the Roman Academy against the notoriously anti-humanist pope Paul II.¹ Leto was accused of heresy, sodomy and sundry other crimes before being imprisoned. His career made an improbable recovery, however, and he became a chancellor in the administrations of the subsequent Popes, Sixtus IV and Innocent VIII. He later became a professor of rhetoric at the College of Rome.² Leto was a noted bibliophile and in the manuscript notes that he added on the inside cover of his book, indicates that he had found an earlier copy of Solinus’ work in 1482 while working in the papal library founded a few years earlier by Sixtus IV. This book included a prefatory epistle that was missing in the Portilia edition, and he decided to add it verbatim.³ This preface first appeared in a printed version of the *Polyhistor* in the 1475 edition by the shop of Giovanni Maria Bonelli in Milan – one of the first books to appear off a Milanese press.⁴ Perhaps this edition was the one consulted by Leto. Leto proceeds to annotate his own copy extensively, creating a marginal index of things, places and words of interest to him that appear in the text. Occasionally he questions Solinus’

¹ Weiss (1958) largely disagrees with this characterisation of Pope Paul II.

² For biographical information on Leto, see d’Amico (1983), d’Onofrio (1989), Lee (1978) and Zabughin (1909–12).

³ On the verso of the first leaf, Leto has added a manuscript note describing his discovery of the codex while in the papal library: *Mcccclxxxii mense martii. In non nullis vetustis codicibus legitur infrascripta epistola ante prefatione C. Solini. Et ego cum romae degerem anno xysti pontifex iiii xi in bibliothecam quam idem pontifex dedicavit ex quodam vetusto codice eam fideliter descripsi, et eius tale initium erat.* [‘Month of March 1482. In not a few old codices one reads the following epistle before the preface to Solinus. And I, spending time in Rome during the reign of Pope Sixtus IV in the library founded by this same Pope, have faithfully copied from one such an old codex, and its beginning was as follows.’] The epistle then follows. Firestone Library, Princeton University, ExKa 1480: Solinus 1480. For another example of Leto’s glossing, in this case on the *Epigrammaton* of Martial, see Grafton (2003) 56–7.

⁴ Solinus (1475a).

text, as when he rejects the notion that crystals can form from glacial ice: *Falsa opinione crystallum corporari ex glacie* (42v). He editorialises, as when he comments on Solinus' mention of Caesar's Gallic campaigns: *Germanici caesaris mortis amen*. He also makes note of places where Solinus borrows from Pliny's *Natural History*, often with a simple *V. Pli.*, i.e. *Vedi Plinium*. He even adds a number of doodles, including renderings of the Hebrides and Orkneys (47r) and of a volcano, when reading of Vesuvius and Etna (79r).

Marginalia indicating cross-referencing with the text that was Solinus' most important source are common in early modern copies of the *Polyhistor*. In fact, the relationship of Solinus to Pliny was much commented upon by contemporaries and near-contemporaries of Leto; this is unsurprising, for the *Polyhistor* is largely composed of judicious plagiarism of Pliny's *Natural History*. Nearly four-fifths of Solinus' text is directly or indirectly taken from Pliny's work. Leto, or perhaps another early owner of the book, has added a handwritten border around the first page of his text, which has now faded almost completely. Still barely visible, however, is a hastily sketched emblem bearing the words *Simia Plinii Maioris*, or 'The Ape of Pliny the Elder'. Whether Leto (if indeed this flourish was from his pen) meant this both in the sense that he replicated Pliny and in the sense that he was an inferior duplicate, is unclear. We know from his extensive writings on the Roman republic and empire that he regarded most writers of the late imperial period as barbarous. And given the extensive marginal evidence, it is evident that Leto knew that the *Polyhistor* was in large part an expurgation of Pliny. This annotated version indicates that he also took the time to read Solinus along with other, better-known authorities from antiquity.

Leto's comment on Solinus is reflective of the ambivalent attitude that readers in the first several decades of print displayed toward Solinus' work. Leto was sufficiently interested in Solinus' text to add a preface from another version, to annotate and cross-reference the text with Pliny, and to make note in the margins of particularly interesting passages and vocabulary. But he also identified the author as the ape of Pliny the Elder, and there is no mention of Solinus in his extant writings, nor any evidence that he ever mentioned the *Polyhistor* in his lectures (where he regularly commented on Horace, Cicero, Lucan, Lucretius, Martial, Quintilian and Ovid).

At about the same time, another commenter was referring to Solinus as the ape of Pliny. Philippus Beroaldus (Filippo Beroaldo), in his preface to the 1500 Bologna edition of Solinus, writes that, having read and corrected Solinus' text, he acknowledged that Solinus was deserving of the label of the

‘ape of Pliny’. But to Beroaldo, as will be shown later in this essay, such an aspersion did not mean that the *Polyhistor* should not be read. To him the appellation was not strictly negative. He regarded the *Polyhistor* instead as a worthy smaller version of Pliny that managed to retain many of the virtues of Pliny.⁵

This essay will explore this ambivalent attitude toward ‘Pliny’s ape’ among Renaissance readers. It will do so in three parts. Firstly, it will provide a brief history of the influence and widespread popularity of the *Polyhistor* in the period between its composition and the fifteenth century. Secondly, the essay will examine many examples of contemporary annotations and marginalia that appear on fifteenth- and sixteenth-century editions of the work, exploring what these marks reveal about how readers of the period read their copies. While acknowledging the epistemic pitfalls in interpreting the intended meaning of marginalia, it is suggested here that patterns of marginal notation indicate common reader reactions. Renaissance readers approached the *Polyhistor* as a window into ancient knowledge and language, but also appear to have regarded the work as a resource for understanding and reflecting upon their own world, even as they questioned the information that they found in the text, and contrasted it with what they read elsewhere.

Thirdly, it will explore the publication history of *Polyhistor* in about the first hundred years of print, paying particular attention to the way editors described the work and its virtues in their prefaces, and to editorial decisions regarding the printing of maps to accompany the text. Early printers demonstrated considerable enthusiasm in getting *Polyhistor* into print, and one must assume that this was in response to demand from Renaissance readers.

In a broader scope, this essay will make some suggestions about the place of Solinus in Renaissance intellectual culture, at a time when natural history was emerging as a distinct field of study and when geographical knowledge was being transformed by a number of concurrent influences. In the longer term, of course, the story of Solinus is one of eclipse, as humanists rejected his late antique style as barbarous and natural philosophers regarded him as an unempirical and unreliable guide to the world that they increasingly took time to examine with care. Against this backdrop, however, what is notable is the degree to which the *Polyhistor* hung on, published by printers and referenced by Renaissance intellectuals.

⁵ Solinus (1500): see n. 79 below.

The *Polyhistor* from antiquity to Renaissance

The *Polyhistor* of Caius Julius Solinus is largely unread today. No English translation has been published since the sixteenth century.⁶ Those who are looking for Roman views on the natural world understandably consult the considerably more comprehensive *Natural History* of Pliny. The *Polyhistor* offers a tour of the portion of the globe known to the late Roman empire, starting with Rome itself and then radiating out into western Europe, the Mediterranean, northern Africa, and, increasingly speculatively, into the Near East and India. Solinus concerns himself with the physical and human topography of these regions, and with matters botanical, zoological and lapidary. Amid this world tour, his emphasis is firmly on the unfamiliar, the bizarre and the miraculous that one encounters.

Solinus himself, as Peter Lebrecht Schmidt has recently demonstrated convincingly (in the process offering some correctives to Theodor Mommsen's critical edition of Solinus, first published in 1864), was probably a fourth-century *grammaticus* living in the environs of Rome. Schmidt's dating of the work's composition at around 357 is several decades later than the likely dates offered by Mommsen.⁷ Zweder von Martels has recently pointed out apparently Christian influences in Solinus' text (which were rejected by Mommsen) and suggested that Solinus himself may have been a Christian.⁸

Solinus' work appeared under a number of different titles throughout the Middle Ages and Renaissance, ranging from *Collectanea rerum memorabilium*, to *De situ orbis*, to *De memorabilibus mundi*. The title intended by the author, and given to the final version worked on by Solinus himself, was

⁶ This translation is by Arthur Golding, who also translated Ovid's *Metamorphoses* into English: Golding (1587). Mary Ann Sullivan rendered the *Polyhistor* into modern English as a Masters thesis at the University of Georgia in 1969.

⁷ Schmidt (1995) 33. Schmidt's treatment of the *Polyhistor* must now be appended to the primary efforts of the last century to summarise the state of research on Solinus: Diehl (1917), Schanz and Hosius (1969) and Sallman (2001). Schmidt's correctives do not take away from the masterful achievement of Mommsen (1895) in his edition of Solinus' work. His presentation of the text is based on his examination of fifteen manuscripts, divided into three separate classes. Both the first (1864) and second (1895) editions of Mommsen's work, along with the Panckoucke (Paris) edition of 1847 have been scanned and published to the web at the Latin Library: www.thelatinlibrary.com/solinus.html (last consulted 2/8/12).

⁸ Von Martels (2003a). Von Martels points out that Solinus condemns cannibalism in strong terms and makes the important point that Solinus' pagan sources (Pliny, *Nat. Hist.* 6.53 and Pomponius Mela 2.1.13) do not contain such condemnations of cannibalism (74–5); he also shows that Solinus demonstrates an aversion to the spilling of human blood (76–7) and uses a number of expressions common in Christian circles (78). Von Martels (2003b) seeks to defend Solinus from his detractors (manifold from the sixteenth century onward), and revive him in a way akin to the rehabilitation of Tacitus, with only mixed success.

Polyhistor, as Schmidt has demonstrated.⁹ When speaking of Solinus' work generally, we will employ this name to describe it.

Solinus' text, as mentioned above, is drawn primarily from Pliny's *Natural History*, with additional extensive borrowings from the *De situ orbis* of Pomponius Mela, the title of which was sometimes conflated with Solinus' work. In his dedication Solinus mentions a host of authorities upon whom he relied, indicating by name sixty-three, half of whom were also mentioned by Pliny. These include Varro, Homer, Virgil, Aristotle, Cato, Cicero and Sallust. He makes no specific mention, however, of his debt to Pliny or to Pomponius Mela. Solinus' extracts come primarily from Books 3–13 and 37 of Pliny, with smatterings from twelve others. Mommsen counts some 1150 references to the *Natural History*, and suggests that many of these borrowings may have come into the *Polyhistor* via intermediate sources.¹⁰

Solinus pares down and reorganises the information that he borrows. As already mentioned, it is the 'memorable things' which are given pride of place in his account – the magical, the spectacular and the grotesque. While Pliny, too, included fantastic stories in his presentation of the facts of the natural world, Solinus regarded the mundane as superfluous and chose to emphasise the stories instead.¹¹ Solinus was not the first antique reader to emphasise the *mirabilia* found in Pliny – in the second century AD, Aulus Gellius, in 9.4 of *Attic Nights*, compared some of the more peculiar items from Book 7 of Pliny's *Natural History* with those he found in a bundle of books by Greek paradoxographers that he purchased in Brindisi.¹²

Such an emphasis on the world's wonders appears to have been a wildly successful recipe, for Solinus enjoyed a consistently broad readership throughout the Middle Ages.¹³ Solinus was one of the small number of classical texts that remained in circulation, and was repeatedly copied in the west, throughout the period from the fall of Rome to the advent of printing. Solinus, along with Pliny, helped to shape medieval expectations about the parts of the world that Europeans did not know at first hand. If anything, Christian writers of the Middle Ages appear to have preferred Solinus over

⁹ Schmidt (1995) 27. ¹⁰ Mommsen (1895) viii.

¹¹ For an interesting example of how Solinus misinterpreted a passage of Pliny's *Natural History*, see Clausen (1947).

¹² I wish to thank William N. West for bringing my attention to this precedent, and to alerting me to Naas (2002) 243–398, which demonstrates that Pliny's own *mirabilia* are concentrated in just a few books of the *Natural History*.

¹³ As George Kimble has stated, 'Solinus' *Collectanea Rerum Memorabilium* is a work of very little real geographical value; yet one, nevertheless, of almost unrivalled popularity in the Middle Ages': Kimble (1938) 5. Milham has identified 15 extant tenth-century manuscripts, 20 from the eleventh century, 35 from the twelfth century, 40 from the thirteenth and fourteenth centuries, and over 100 from the fifteenth century: Milham (1984) 75.

Pliny.¹⁴ Solinus' work established its popularity as a geographical resource soon after its composition, judging from the numerous references to it in late antiquity. Theodor Mommsen finds direct and indirect references to Solinus in authors as early as Ammianus Marcellinus and Augustine.¹⁵

Among those who subsequently drew from Solinus were Martianus Capella, Priscian (the first to quote him as an authority by name), Gregory of Tours, Isidore of Seville and the Venerable Bede.¹⁶ Max Manitius in his *Geschichte der Lateinischen Literatur des Mittelalters* chronicles just how frequently references to Solinus appeared in the literature of the Middle Ages. Manitius suggests that the medieval tendency toward encyclopaedism made the hearsay of Solinus very appealing. Solinus was particularly popular as an authority on geographical knowledge.¹⁷ This popularity is evidenced

¹⁴ Wittkower (1942) 167. ¹⁵ Mommsen (1895) xix–xxv.

¹⁶ Capella produced a summary of what all educated people needed to know about the seven liberal arts, and in his sections on geography preserved a good number of Solinus' fantastic stories, including the accounts of Calabrian snakes that sucked milk directly from the udders of cows: Phillips (1998) 7. On Priscian quoting Solinus in his *Institutiones grammaticae* (c. 450), see Beazley (1949) 248. On Bede, see Colgrave and Mynors (1992) xxxi, 14. We know that a copy of Solinus was in Bede's library: Laistner (1935) 226. For more on Bede's use of Solinus, see Merrills (2005) 250, 257, 269. British residents after Bede continued to rely on Solinus' text as a source for the geography of their own lands. It is likely that copies of Solinus were available to scholars in Alfredian England: see Bately (1990) 53. Henry of Huntingdon, who wrote the *Historia Anglorum* for Alexander, Bishop of Lincoln, in the twelfth century, quoted Solinus when describing the richness of Britain's agricultural land: 'Whence Solinus says, "So abounding is the fodder in Britain in certain places that the abundance drives the herds to danger, unless they are occasionally prevented from eating"': Greenway (1996) 10. It is also possible that William of Malmesbury, in his twelfth-century *Gesta Regum Anglorum*, was inspired to call Britain 'the end of the world' from his reading of Solinus 22: 'The end of the world would be the coast of Gaul, if the island of Britain with its significant size did not deserve the name of almost another world' (Mommsen (1895) 99.14–100.1). The above text is from Mynors, Thomson and Winterbottom, M. (1998) 82; commentary on this passage is in Thomson (1999) 48–9. Similarly, Gerald of Wales (Giraldus Cambrensis), writing in the second half of the twelfth century, produced a descriptive work of Ireland called *Topographia Hibernica* that repeatedly mentioned Solinus as a source. For example, he cites Solinus on the lost western island of 'Tyle': 'Solinus relates that Tyle is the most remote of the many islands that encircle Britain. He says that at the summer solstice, there is no night there and at the winter solstice, correspondingly, there is no day.' But he also contradicts Solinus' contention (and that of Isidore of Seville) that Ireland was without bees: 'Indeed, Solinus and Isidore say that [Ireland] is without bees. But, if I might beg the pardon of both of them, looking about they should have written differently; it is without vineyards, and not lacking in bees': see Dimock (1964) 28, 98 (cf. Mommsen (1895) 101.11 and 100.10). For Solinus' treatment of the island of Tyle, see Cassidy (1963) 597–9.

¹⁷ Manitius (1931) 919. Medieval writers often cited Solinus in conjunction with Orosius, Priscian and Isidore of Seville, authors who themselves had borrowed heavily from Pliny and Solinus. On Orosius, see Lacroix (1965). On Isidore of Seville's use of Solinus, see Mommsen (1895) xxvii. On Isidore more generally, see Fontaine (1983) and Brehaut (1967). On Priscian, see, most recently, Ballaira (1989). It is occasionally difficult to determine whether a medieval compiler borrowed directly from Solinus or through one of many intermediaries who had

in the frequent mention of Solinus' text in medieval library catalogues – a testament to its quite remarkable distribution.¹⁸ Solinus is also the most frequently mentioned source in the famous Hereford world map, supplying the mapmakers with explicit references to animals, peoples and geographic features from exotic corners of the world.¹⁹ It is perhaps unsurprising that the creators of such a *Mappa Mundi* would be attracted by an ekphrasis of the world that emphasised *mirabilia*. Both Dante (through Brunetto Latini) and Chaucer (through Alain de l'Isle) appear to have incorporated information from the *Polyhistor* into their work.²⁰ 'In the Middle Ages, the *Polyhistor* was read as an illustration of the richness of God's creation. The steadfastness of truth to be found in Solinus gave it something of the character of a universal and eternal Book of Nature', writes Zweder von Martels.²¹ The influence of Solinus on the imagination of medieval people, their understanding of

themselves relied on Solinus. A ninth-century west Frankish monastic, the so-called Anonymus Leidensis, for example, composed a treatise on geography that combined the work of Pomponius Mela, Martianus Capella, Solinus, Orosius and Isidore. He named this compendium *De situ orbis*, a title that would subsequently occasionally be attached to Solinus' work in some editions.

¹⁸ According to Manitius, Solinus' text was mentioned in one pre-twelfth-century catalogue in France, five catalogues in the twelfth century, and four in the thirteenth century. In Germany it was mentioned in six catalogues before the twelfth century, four from the twelfth century, and two from the thirteenth. It is also mentioned in catalogues of British and Italian libraries. Multiple manuscript copies could be found in the diocese of Liège: a copy from 1460 in Liège itself, plus a copy dated 1049 in Lobbes, and one from 1105 in Stablo (see Manitius (1931) 708–9).

¹⁹ The debt of the Hereford map to Solinus is treated most recently in Reed Kline (2001). Reed Kline demonstrates that the Hereford map represents a confluence of two overlapping traditions on animals: the classical, notably Solinus, and the medieval Christian bestiary. The map names Solinus specifically in several of the textual descriptions that grace it. For example, the map locates the mantichore in India (102, n. 13), corresponding with Solinus 52 (Mommsen (1895) 190.1–4). In the case of the *yale*, which Solinus locates in India, the map's scribe has placed the animal in Ethiopia, despite an accompanying text excerpt from Solinus that indicates its origin. The Solinus text, also from chapter 52, reads as follows: 'There is also the yale, in other ways like a horse, with the tail of an elephant, black in colour, with the jaws of a boar, sporting horns more than a cubit in length accommodated to any movement it wishes to make; nor are they rigid but movable, so that it can use them while fighting: when fighting it uses one but pulls back the other, so that if the sharpness of one is dulled by some blow, the sharpness of the other can succeed it. It can be compared to the hippopotamus: certainly it also enjoys the delights of the water' (Mommsen (1895) 189.9–15). There are in total twelve separate direct references to Solinus' text on the map, four relating to animals, four to exotic peoples and four to geographic locations: Reed Kline (2001) 104, n. 24. Kline also suggests that the mapmaker probably had illustrated manuscript copies of Solinus to draw upon. For more on the medieval tradition of illustrating monsters from the east, see Wittkower (1942). On a lavishly illustrated early fourteenth-century copy in the Ambrosian Library in Milan, see Cogliati Arano (1979).

²⁰ On Dante, see Moore (1968) and Toynbee (1894) 63. See also Baldwin (1982) xiii. On Chaucer's use of Solinus in his *Parliament of Foules*, see Ansell (1932) 9.

²¹ Von Martels (2003b) 79.

the natural world, and on traditions such as the medieval bestiary was broad-ranging and deserves a monograph in its own right.

Early Renaissance thinkers continued to read and reference Solinus' text. In his *De sui ipsius et multorum ignorantia*, Petrarch offered a critique of the genre of medieval encyclopaedism.²² But Petrarch also owned a number of works by classical encyclopaedists, including Pliny, Pomponius Mela and Solinus, and Renaissance humanists continued to remain interested in encyclopaedic works.²³ Silvius Aeneas Piccolomini, later Pius II, paid little more than lip service to natural philosophy in his educational programme, but put Solinus on a reading list he compiled for the edification of Duke Sigismund of Tyrol.²⁴ The influential Florentine humanist and collector of books Colluccio Salutati owned a Solinus manuscript, one to which he added numerous marginal annotations and corrections.²⁵

Solinus must also be counted as one of the authorities, alongside Pliny, Marco Polo and John de Mandeville, to whom Christopher Columbus looked in anticipation of his voyages to the New World.²⁶ Columbus saw numerous references to Solinus in the *Ymago Mundi* by Cardinal Pierre d'Ailly, of which Columbus owned a copy now famous for his extensive marginal annotations.²⁷ D'Ailly borrowed liberally from his reading of Solinus in constructing his own description of the known world. The *Historia rerum ubique gestarum*, by the aforementioned Piccolomini, which Columbus also owned, drew repeatedly from Solinus for geographical information. Columbus annotated his copy of the *Historia* as well, adding his observation

²² Petrarch's critiques of the medieval inclinations toward encyclopaedism and of Aristotelianism more broadly in *De sui ipsius et multorum ignorantia* are discussed in Quillen (1998).

²³ Petrarch quoted Solinus once and Pliny twenty-five times in the *De remediis utriusque fortune*: Rawski (1989) 291. Neither Solinus nor Pliny, however, appeared on Petrarch's celebrated list of his favourite books written on the flyleaf of his manuscript of Cassiodorus' *De anima* and Augustine's *De vera religione*, although Petrarch did own a copy of Pliny's *Natural History* – see Ullman (1923).

²⁴ Piccolomini, writing on 5 December 1443, recommends to the Duke, as geographical resources, Pliny, Ptolemy, Isidore of Seville, and Solinus: 'if you wish to scan the geography of the world with your mind's eye and observe the lives and customs of different lands, and what each region produces and fails to produce, you should read Pliny's *Natural History* and the works of Ptolemy, Solinus, and Isidore of Seville'. The Latin Library has published the 'Epistula Sigismundo' at www.thelatinlibrary.com/piccolomini.ep5.html (last consulted 2/8/12).

²⁵ See Bell (1929). Proof that Salutati actively studied Solinus can be found in his letters, published as Novati (1891–1905): see especially vol. 2, 102; vol. 3, 237; and vol. 4, 93–4.

²⁶ Deluz (1987) 213.

²⁷ This annotated copy of Pierre d'Ailly's text has been edited in Buron (1930). This edition includes the text with the surrounding annotations, with facing French translations. Buron indicates dozens of examples of d'Ailly's borrowing of Solinus' text, often through an intermediary such as Isidore of Seville.

that Solinus had asserted that the sea from Spain to India was navigable.²⁸ This notion was oft repeated by Columbus and served as an underlying conviction in his voyages. Solinus spoke of ‘Islands of the Blessed’: Columbus took these to mean the Canaries.²⁹ According to Ferdinand Columbus, in his *History* of his father’s voyages, the Admiral took the island Espirido, mentioned in chapter 68 of Solinus as forty days’ sail from Cape Verde, to be the East Indies.³⁰ It has also been suggested that Columbus was particularly influenced, in his observations of the New World, by some of Solinus’ more outlandish suggestions about the inhabitants of India, both human and non-human.³¹

The interest in the *Polyhistor* thus persisted into the fifteenth and sixteenth centuries. The Renaissance enthusiasm for all things ancient extended into the realm of the sciences, taking in not only geography, but astronomy, botany, medicine and a range of other subjects.³² The rebirth of interest in antiquity included a fascination with the many Roman compilers, encyclopaedists, and cosmographers, who seemed to have succeeded in encapsulating the entire world and its contents. Ancient texts were to be mined for philosophical, political and ethical lessons, hence the time that many humanists spent on philological questions and in making sense of difficult or unfamiliar language.³³ The authority of the ancients contended

²⁸ In the appendix to *Ymago Mundi*, Buron has reprinted the annotations added to Columbus’ copy of Pius II’s *Historia rerum ubique gestarum*, now at the Columbine Library in Seville. Columbus wrote in the margins on f.6 that *Julius* [Caius Solinus] *docet quod omne marem quod ab india usque in hispaniam per dorsum africe sit navigatum* [‘Julius [Caius Solinus] teaches that the entire sea which [extends] from India to Spain might be navigated along the ridge of Africa’] (Buron (1930) 742–3). Columbus later adds a gloss, on f.151, identifying Solinus as one of the authorities he has consulted for (misleading) information regarding the Hircanian (or Caspian) Sea: *Auctores qui volunt quod mare hircanum sit sinum oceani septentrionalis. Plinius. Julius Solinus. Strabo.* [‘Authors who maintain that the Hircanian Sea is a bay of the northern ocean. Pliny. Julius Solinus. Strabo.’] (Buron (1930) 748).

²⁹ Branca (1994) 44.

³⁰ Columbus (1992) 15: ‘Solinus in the 58th chapter of *The Memorable Things of the World* says that from the Gorgon Islands, which he believed to be the Cape Verde Islands, it was a journey of forty days via the Adriatic Sea to the island of Esperido, which the admiral was sure were these islands themselves.’ It is interesting to note that in Mommsen’s edition, this section is found in chapter 56 (the last chapter) instead (Mommsen (1895) 212.1–2). For more on the way Solinus’ work might have shaped the expectations of Columbus, see Gil (1989) 42, 93, 161, 189–90.

³¹ Flint (1992) 16–20.

³² The long-held view that Renaissance humanists were not at all interested in natural, scientific and geographic matters must now be qualified in light of the work of Anthony Grafton: see Grafton (1991), especially chapter 1, ‘The Humanists reassessed’: 1–22.

³³ For the motivations of Renaissance humanist readers, see the classic Kristeller (1979). More recently see the excellent essays by M. Reeve, ‘Classical scholarship’, and J. Kraye, ‘Philologists and philosophers’, both in Kraye (1996): 20–46, 142–60. Philological concerns were foremost

with other sources of authority: new geographical and cartographical techniques, newly discovered lands, and the slow emergence of an empirical spirit. But the pull of that ancient authority remained strong. As Anthony Grafton has written: 'We might ask "Who cares whether Pliny knew about it – does it work?" But the Renaissance scientist appealed to authority as much as, sometimes more than, to results; his habitual question was "who knew about it, and do their opinions matter?"'³⁴

Two very different sixteenth-century invocations of Solinus demonstrate this paradox. In Book 5 of *Pantagruel*, Rabelais places Solinus in the land of Satin, where he is among a throng of antiquaries and chroniclers who are eagerly scribbling down the fantastic stories told by the grotesque figure named Hearsay (Book 5.31). André Thévet, in 1554, wrote in the dedicatory letter to his *Cosmographie du Levant*, his narrative geography of the Near East, that he was seeking in his work to follow the model provided him by Solinus: 'I have attempted to do as Solinus does in his book named *Polyhistor*, where not only does he make mention of countries and towns, but also of animals, ways of living of the inhabitants, and many other singular things.'³⁵

The continued interest in Solinus' work in the Renaissance is demonstrated most clearly in the many printed versions of the text that appeared between 1473 and the middle of the sixteenth century. Early printers demonstrated considerable enthusiasm both for Solinus and for Pliny's *Natural History*.³⁶ The first printed edition of Solinus appeared in 1473, under the title *De situ orbis terrarum et memorabilibus*, a product of the Venetian workshop of the Frenchman Nicholas Jenson, and was the very first folio edition to come off Jenson's presses. At least twelve additional incunabulum editions of Solinus' text subsequently appeared, all by different printers. Nine of these were of Italian provenance, but they also include the first work printed in France by a Frenchman, the 1475 edition published by Louis Symonel.³⁷

in the mind of the French humanist and ambassador Étienne de Laigue, who published an extensive commentary on Pliny's *Natural History* in 1529. Some of the corrections of Pliny offered by de Laigue came directly from Solinus: Boutroue (1992) 40.

³⁴ Grafton (1992) 165.

³⁵ '[Je] me suis essayé de faire come Solin en son livre nommé Polyhistor, ou non seulement il fait mention des pais, et viles: mais aussi des animaux, manieres de vivre des habitans, et plusieurs autres choses singulieres': Lestringant (1985) 5. Lestringant's scholia (beginning at 295) demonstrate that Thévet drew upon Solinus dozens of times for his descriptions of the Middle East, mentioning Solinus by name nine times throughout the text.

³⁶ The *Natural History* was quite possibly the first work to be produced by an Italian press, by Johannes Speyer in Venice in 1469.

³⁷ Solinus (1475b).

Solinus continued to be a popular subject for printers into the first several decades of the sixteenth century. Sixteenth-century printers often published it in conjunction with other, related texts, most frequently the *De situ orbis* of Pomponius Mela – this was the case with the Aldine edition, which appeared in 1518.³⁸ The sixteenth century also saw printing of Solinus move outside of Italy and France, with at least twenty-five editions published in the empire before mid-century. The editions become fewer and farther between after the first vernacular edition, an Italian translation by Gabriele Gioliti de' Ferrari, which appeared in 1557.³⁹ A Spanish edition followed in 1573, with the first English translation, by Arthur Golding, under the title *The Excellent and Pleasant Worke of Iulius Solinus Polyhistor*, coming out in 1587.⁴⁰

These publication numbers demonstrate that the *Polyhistor* continued to be read widely in the course of the fifteenth and sixteenth centuries. How such a text was being read is less clear. Amid a time that was witnessing considerable change in the realm of natural philosophy, the *Polyhistor* occupies a curious position. What was the approach of Renaissance readers to a work which, even in their own time, they must have recognised, was fast becoming obsolete as a reliable guide to the world around them?

Glossing the *Polyhistor*

H. J. Jackson has suggested that early modern glossators annotated their books for much the same reasons that we do today: 'They mark up their books as a way of learning and remembering what they contain, and improve them by correcting errors and adding useful relevant information. Some early readers engaged themselves in argument with the books they read, or expressed distaste for or disapproval of them.'⁴¹ This range of motivations is evident in marginalia found in early modern copies of the *Polyhistor*. My interest in such annotations was first raised after I saw a 1459 manuscript of the *Polyhistor* located in the Wilson Rare Book Library of the University of North Carolina.⁴² This item boasts extensive and curious marginalia added by the book's fifteenth-century owner, who not only attaches the text markers and hand pointers so typical of a humanist seeking to expand

³⁸ Solinus (1518). Other examples include Solinus (1521), Solinus (1536) and Solinus (1557a).

³⁹ Solinus (1557b).

⁴⁰ Solinus (1573). On the Golding translation, see n. 6 above. The first translation into English of Pliny's *Natural History*, by Philemon Holland, did not appear until 1601: Holland (1601).

⁴¹ Jackson (2001) 51.

⁴² This manuscript is Manuscript #13 in the Wilson Library.

his vocabulary, but also observations on the text gleaned from his own experiences in France. He remarks that he has seen a crocodile there (presumably in the king's menagerie); that he has eaten a meal of stork; that, despite the suggestions of Solinus to the contrary, the people of Gaul are the most Christian of people; that he had seen a jet-stone in the necklace of the French royal chancellor; and, most curious and revealing of all, that he had delivered camels to the court of the King in the year 1470.⁴³ While he never reveals his name, Christopher McDonough and I were able, with the information that he does divulge in his often humorous marginal asides, to identify the glossator as a Neapolitan exile named Boffile de' Guidici, and to trace the travels he references.⁴⁴

The practices of Boffile de' Guidici and Pomponio Leto predict those that we see in subsequent readers in a number of ways. It is evident that Renaissance readers examined the text with an eye to determining how it could be related to other classical texts and what it might yield about the language of antiquity. It was primarily philological concerns, for example, that led Ermolao Barbaro to publish his *Castigationes Plinianiae* in the 1490s, not whether Pliny was an accurate recorder of the natural world. When he did highlight errors, he usually corrected them with reference to another ancient authority, as when he disputed Pliny's claim that elephants lived between two hundred and three hundred years. His proof text was Aristotle's *Historia animalium*.⁴⁵ It is likely, then, that many read Pliny, or the *Polyhistor*, as repositories of classical vocabulary and style to be mined. Thus these encyclopaedic texts were less geographic or botanical guidebooks than they were collections of words and facts. So we should not be surprised that many fifteenth- and sixteenth-century readers cover their copies of the *Polyhistor* with marginalia that indicate their close reading of the words, style and sources of the author. Marginal word markers and hand pointers, common in the annotations of the age, abound. Of course, you could find such word markers in a text on any subject in this age; it was

⁴³ These glosses are found on the following pages of the manuscript: 169v (crocodile); 176v (stork); 157v (Gaul); 158v (royal chancellor); 179r (camels).

⁴⁴ For a detailed examination of the annotations on the North Carolina manuscript, along with an exploration of the identity of its owner, see Dover and McDonough (2011).

⁴⁵ This example cited in Debus (1978) 35. In the *Castigationes plinianiae*, Barbaro did a systematic examination of all thirty-seven books of Pliny's *Natural History* and created a book almost as long as the original. While he drew attention to occasional errors made by Pliny, his primary points of interest were in the language and the ancient sources that Pliny used. Barbaro's interest in classical medicine and botany also extended to Dioscorides, on whom he wrote a commentary. On Barbaro and Dioscorides, see Reeds (1976) 527. A recent modern edition of Barbaro's work is Pozzi (1973–9). Barbaro once wrote that 'Without [Pliny], Latin scholarship could not exist': see Nauert (1979) 75.

common practice for humanistic readers to highlight words and linguistic usages of particular interest. In pseudo-encyclopaedic works such as the *Polyhistor*, however, jam-packed with people, places, things and references to other authors, such word markers multiply exponentially. In some cases, the copious additions of word identifiers and rubrics (sometimes literally in red ink) effectively add up to an intratextual marginal index. Readers clearly found such additions useful, so much so that printers began to reproduce them in print. As was often the case, early modern printed books frequently mimicked the physical appearance of manuscripts. Printed word and subject markers alongside the text came to serve as running marginal indices and rubrics, saving the reader the labour of adding them by hand. Such instruments can be seen as early as the 1503 Paris edition of the *Polyhistor* by Jean Petit. Petit's edition resembles closely a manuscript glossed with text and subject markers reproduced in print.⁴⁶

Renaissance readers, of course, were well aware that Solinus was compiled from other sources. I have seen dozens of copies of Solinus in which the owner has made marginal notes indicating cross-references with the original, or at least previous, source of Solinus' information. Like Pomponio Leto in the 1480 edition in Princeton Library discussed above, annotators frequently traced Solinus' debts to Pliny in the margins and between the lines of text. *Vedi Plinium* followed by book and chapter were left in the margins by a great many readers. Some glossators also made note of the significant borrowings from Pomponius Mela's *De situ orbis*.⁴⁷ Others took their cross-referencing farther afield, making note of parallels and contrasts with a great many other geographers, cosmographers, historians, theologians and philosophers. These glosses always pertain to other writers from antiquity.

The most remarkable example of such marginal cross-referencing that I have seen is on a 1512 edition owned by Camillo Gradi, and now housed at the Young Research Library at the University of California, Los Angeles.⁴⁸

⁴⁶ Solinus (1503). On the broader practice of incorporating manuscript notes into print editions in the early modern period, see Heinlein and Saenger (1991).

⁴⁷ Examples include Smithsonian Institute, Dibner Library, G113.S68 1493: Solinus (1493); Folger Shakespeare Library, INC S554: Solinus (1480); Huntington Library, RB 120110: Solinus (1536); Library of Congress, Rare Book Collection, PA6512.A2: Solinus (1526). In the last of those, as Mela and Solinus are published together, the annotator has indicated the parallel sections of text simply by indicating page numbers in the volume.

⁴⁸ I wish to thank the University of California, Los Angeles, for granting me a virtual Thayer Fellowship. This made possible the digital reproduction of this book. It is now available for public use on-line in hi-definition with zoom technology at unitproj.library.ucla.edu/dlib/solinus/ (last consulted 2/8/12). Readers can consult this on-line copy to see the annotations to this text that I will describe below.

Gradi, who dated his copy 1518 on the final page of text, may possibly have been from Mantua, as he makes two references to his direct knowledge of women in Mantua.⁴⁹ His copious annotations, almost all of which offer citations of other classical authors, appear in the margins and spaces between lines of text on about half of the book's pages. Some pages are practically covered in such notes. There are references to more than forty separate works from antiquity, by more than thirty different identified authors.⁵⁰ The marginalia reflect interest in a diverse assemblage of the subjects examined by Solinus in the course of his work. Only several representative examples of the added notes can be considered here.

Gradi's glosses fall broadly into three categories. First, he painstakingly works his way through the Solinus text indicating where Solinus borrowed from other authors (predictably, Pliny's *Natural History* above all others). Second, he indicates where other classical authors cover the same subject matter, on occasion quoting them directly. These notes are employed to indicate both parallels and contrasts. Third, Gradi adds notes that are largely philological, pointing out the use of particular pieces of Latin vocabulary, again citing parallels. He also notes where the names for places, creatures and peoples used by other authors differ from those employed by Solinus.

Gradi was, unsurprisingly, well aware of Solinus' primary debts to Pliny and to Pomponius Mela. There are over a hundred references to words or passages in the *Natural History*, reflecting the close parallels with the *Polyhistor*. Most of these are simple cross-references such as *Pl 3 cap v* (i.e. 'Pliny 3.5', 17v), but Gradi also makes note of where Solinus borrows longer passages from Pliny, such as on 18v, where he discusses Libya – *omnia Pl V cap primo*. At the end of this passage, he recognises the completeness of Solinus' appropriation from Pliny, as he adds *Pl V cap primo omnia pene ad*

⁴⁹ At 2v.

⁵⁰ My full accounting of the works cited by Gradi is as follows: Ammianus Marcellinus' *Res gestae*; Appian's *Roman History*; Aristotle's *Ethics*, *On the Generation of Animals*, *Parts of Animals* and *History of Animals*; Arrian's *Anabasis of Alexander*; Censorinus' *De die natali liber*; Cicero's *Commentary on the Dream of Scipio*, *Tusculan Disputations* and *On Duties*; Diodorus Siculus' *Bibliotheca historica*; Dionysius of Halicarnassus' *Roman Antiquities*; Eusebius' *Ecclesiastical History* and *Preparation for the Gospel*; Frontinus' *On the Aqueducts of Rome*; Herodotus' *Histories*; Horace's *Art of Poetry* and *Odes*; Livy's *History of Rome*; Lucan's *Pharsalia*; Macrobius' *Saturnalia*; Martianus Capella's *Satyricon*; Ovid's *Fasti*; Philostratus' *Life of Apollonius of Tyana*; Pliny the Elder's *Natural History*; Plutarch's *Life of Romulus*; Polybius' *Histories*; Pomponius Mela's *De situ orbis*; Propertius' *Elegies*; Ptolemy's *Almagest*; Quintilian's *Institutio oratoria* and *Declamationes Minores*; Seneca's *Medea*; Suetonius' *Lives of the Caesars* and *Lives of Illustrious Men*; Silius Italicus' *Punica*; Statius' *Thebaid* and *Silvae*; Strabo's *Geography*; Albius Tibullus' *Elegies*; Valerius Maximus' *Memorable Deeds and Sayings*; Varro's *On the Latin Language*; Vibius Sequester's *De fluminibus, fontibus, lacubus, nemoribus, paludibus, montibus, gentibus*; and Virgil's *Georgics*.

verbum (i.e. ‘Pliny 5.1 almost word for word’).⁵¹ In some of his glosses, he quotes verbatim from Pliny, in order to indicate the directness of Solinus’ borrowing.⁵²

The first several pages of the text, where Solinus discusses the early history of Rome and the origins of its customs and institutions, are chockablock with marginalia. These manuscript notes make it evident that Gradi took time to consider Solinus’ treatment of this subject matter in conjunction with what he read in other ancient works that discussed Roman origins. These early pages see Gradi cross-referencing a wide array of authorities, including Macrobius, Pliny, Valerius Maximus, Livy, Plutarch, Frontinus, Virgil, Eusebius’ *Praeparatio evangelica*, Dionysius of Halicarnassus, Varro’s *De lingua latina*, Ovid’s *Fasti*, Censorinus’ *De die natali liber*, Suetonius, Statius’ *Thebaid* and Diodorus Siculus’ *Bibliotheca historica*.

It is difficult to determine whether Gradi was looking at these works as proof-texts or whether he was merely cataloguing the claims of a variety of ancient authorities regarding Roman origins. Probably it was a combination of both. The latter appears to be the case in Gradi’s glosses on the very first subject engaged by Solinus: the origin of the name of Rome. Here, Gradi cites other considerations of the subject: Valerius Maximus 50, Pliny 3.5, Plutarch’s *Life of Romulus*, and Macrobius’ *Saturnalia* 3.8.⁵³

Similarly, when Solinus discusses the origins of Roman calculations of the passing of the year, Gradi compares Solinus’ view with those of other authors who have written on the subject. He points to Plutarch’s famous discussion of the early Roman calendar in his life of Numa Pompilius; to Censorinus’ discussion of the formation of the calendar in *De die natali liber* 20 (modern editions identify this as [chapter 17](#)), where he reports the views of Lucinius Macer and Fenestella (both of whose histories exist only in fragments), each of whom claimed that the Roman calendar was twelve months long from the beginning; to Macrobius’ lengthy consideration of the calendar in *Saturnalia* 1.12 (modern editions locate this discussion in 1.8), where he indicates that under Romulus the calendar had only ten months; and to Varro’s extended reflection on the origins of the months of the calendar in *De lingua latina* Book 6 (which Gradi strangely identifies as 2.6 – Book 2 of this work had long been lost).⁵⁴ From his concern for the number of months in the year, he moves on to the number of days in the

⁵¹ In fact, Solinus’ borrowing here from Pliny 5.1 is not verbatim, but a scarcely disguised paraphrasing of Pliny’s description of Libya and its inhabitants.

⁵² One example (among several) appears on 22v, where Gradi notes what Pliny has to say about Solinus’ description of the gleaming forest in the south of Ethiopia.

⁵³ 1r. ⁵⁴ 2r.

year. He cites Strabo's (17.145) discussion of the Egyptian practice of adding five days to their twelve thirty-day months, and cross-references Macrobius, Censorinus and Diodorus Siculus on the Egyptian calendar.⁵⁵

In the margins alongside Solinus' discussion of human fertility (3r), Gradi cross-references what he reads with a series of passages from Aristotle's works on animals. Where Solinus suggests that men remain fertile until the age of 80, Gradi notes that Aristotle, in *Historia animalium*, claims that men stop generating sperm at the age of 70. He then references the *Natural History*, where Pliny puts the number at 86.⁵⁶ On the growth of fetuses in the womb, he looks to the relevant passages in *De generatione animalium* and *De partibus animalium*.⁵⁷ On the so-called Agrippan births, named after Marcus Agrippa's feet-first delivery, he cites Pliny's description of such deliveries (from which Solinus clearly drew his information) as well as Macrobius' remarks about Augustus' daughter Julia, the adulterous wife of Agrippa.⁵⁸

Gradi is likewise interested in glossing Solinus' detailed and often fantastic descriptions of the world's natural history. After Solinus' narrative leaves Rome and begins its voyage through the known world, describing the topography, peoples, and flora and fauna of its various regions, the authorities he consults in his marginal notes change. Pliny's *Natural History* remains well represented, but now ancient authorities on the natural world appear in the glosses. Aristotle's works on animals, Philostratus (*Life of Apollonius of Tyana*), Strabo, Ptolemy, Pomponius Mela,⁵⁹ Herodotus, and Silius Italicus (*Punica*) are all mentioned as those addressing parallel subjects to Solinus. There are dozens of extended glosses concerning Solinus' geographic tour of the world beyond Rome and description of the marvels found therein. A representative sample of these will have to suffice.

⁵⁵ 2r. A reference that Gradi makes to *Saturnalia* 1.8 is somewhat unclear: it is not until 1.14 that Macrobius states that the Egyptians were the first to establish a solar calendar. In 1.15 he adds that the practice of adding an intercalary day came from the Egyptians. The reference to *De die natali liber* is 19.4, where Censorinus describes the changing length of the months among the Egyptians. Gradi adds (a presumably later) gloss indicating that Diodorus in his *Bibliotheca historica* (at 1.13) also agrees with Macrobius' views on the matter of intercalary days. The reference to Pliny is uncertain, as nowhere in Book 7 does Pliny discuss these issues. For a discussion of these variant views in antiquity on the Ptolemaic, Egyptian and Julian calendars, see McCluskey (2000) 24–8.

⁵⁶ 3r.

⁵⁷ 3r. The chapter he cites in *Parts of Animals* (chapter 4) in fact deals with the circulatory systems of animals.

⁵⁸ 3r.

⁵⁹ Gradi's references to Mela are consistently imprecise. He repeatedly cites 3.107, the final book of the work, in which Mela lists a number of cities on the north African coast, and which offers no obvious analogs for the passages that prompt his glosses.

For example, alongside Solinus' discussion of the town of Cyrene in north Africa (modern-day Shahhât, Libya), founded by Battus the Spartan, Gradi notes that this same town is described in Strabo 17.14 and also in the *Punica* of Silius, the third book of which he cites directly. He also notes that Herodotus made mention of Cyrene.⁶⁰ In this same passage, Solinus claims that Battus did the founding during the forty-fifth Olympiad while Marcius was king of Rome; Gradi notes that he was unable to find mention in Eusebius' *Chronicle* that Marcius was ruling during this Olympiad.⁶¹

In his tour through Ethiopia, Solinus describes one of the many natural marvels that fill his narrative, giant ants in the shape of dogs. This prompts Gradi to find other references to remarkable ants in ancient writing. Gradi cross-references Solinus' fantastic account with Book 3 of Pomponius Mela (citing a chapter where Mela does not discuss ants or Ethiopia). Then he cites Pliny 3.31, where Pliny places such creatures, as big as the wolves of Egypt, in India – another example of Solinus' inexact borrowing. He notes the passage in Book 3 of Herodotus' *Histories*, where ants in India are said to transport gold dust from underground. The tale is repeated by Strabo (3.36) and Propertius (*Elegies* 3.13), and Gradi cites both of these instances.⁶² As so often in classical lore, the fantastic is interchangeably placed in far-off Ethiopia or India.

Where Solinus describes the apocryphal Seres, a Scythian tribe said to live to the northeast of the Caspian Sea and to produce fine cloth by sprinkling water on trees growing in the region, Gradi glosses on other mentions of these mysterious people by other authors.⁶³ This description of silk manufacture is taken directly from Pliny's *Natural History*, Book 6, but Gradi mistakenly locates it in Book 11.⁶⁴ He also notes that Ammianus Marcellinus describes this tribe in Book 23 of his *Res Gestae*, where they are described as a peaceable people. He then quotes directly from Statius' *Silvae* 1.2, where the poet mentions the greed of the Seres, and *Georgics* 2 where Virgil makes mention of the Seres' practice of combing silken threads off trees.⁶⁵ Finally, he notes Strabo's *Geography*, Book 15, where Strabo reports that the Seres can live as long as two hundred years. This amounts to a marginal compendium of the scattered, and varied, mentions of this far-off people.

⁶⁰ 21r. ⁶¹ 21r. ⁶² 22v.

⁶³ 30r. Here Gradi quotes directly from *Georgics*, 2.121 and from *Silvae* 1.2.122.

⁶⁴ The description by Pliny is in 6.20. In his translation of the *Natural History* for the Loeb Classical Library, H. Rackham translates 'Seres' as 'Chinese': Rackham (1938–62) vol. 2, 379.

⁶⁵ The specific reference from Ammianus Marcellinus is *Res gestae* 23.67–8.

What does Gradi's extensive glossing of his copy of the *Polyhistor* reveal to us about the way that he read the work? It is evident that Gradi is reading Solinus for purposes other than just mining it for language, as a humanist might. Many of his marginal comments reveal that he is interested in the *Polyhistor* as a source for information on the early history of Rome, on world geography, and on those people and things inhabiting the various corners of the known world. He adds marginalia to direct him toward other authorities writing on the same subject.

Humanist readers like Gradi regarded their reading of the *Polyhistor* as an opportunity to examine Solinus' language and correlate the information his text provided with that found in the works of other ancient authorities. But there is also evidence that readers read Solinus as a lens through which to see the natural world around them. The kaleidoscopic view of the world taken by Solinus afforded readers opportunities to reflect upon their own interactions with the world that they encountered in their own day. Such was the case with the annotations on the fifteenth-century North Carolina manuscript mentioned above. I have found many other such examples in the spaces and margins of fifteenth- and sixteenth-century copies of the *Polyhistor* in libraries across the United States and Britain.

In one remarkable case, an unknown fifteenth-century reader felt moved to recount his own experience with creatures described in the text. In the margins of a 1480 Parma edition of Solinus housed in the Folger Shakespeare Library, the fifteenth-century owner, one of at least three hands that annotated this copy, was moved to add autobiographical remarks relating to Solinus' discussion of giraffes ['camelopards'] in Ethiopia:

*Camelopardalis Sixto Pontifice Maximus iiii a soldono Regi Ferdinando cum aliis bestiis dono missus est quod animal ciraffan vocabant. Vidi ego illud Neapoli anno 1480 mense Iunii summites magnarum arborum cum collum extendebat carpens. Ciriacus Anconitanus dicebat in antiquis monumentis animalia sculptum et sub pedibus litteris Caldeis Saraff scriptum in orientalibus partibus vidisse. Alia camelopardali tempore mei anno 1487 a soldano Laurentio Medici Florentino missa Italiam vidit et in foro secundo vidi ego eam cum leone ferisque pluribus.*⁶⁶

Under Pope Sixtus IV a camelopard, which they called a giraffe, along with other beasts, was sent as a gift to King Ferdinand, by the sultan. I myself saw it in Naples in June 1480, extending its neck to feed from the tops of tall trees. Cyriacus of Ancona has said that he saw in the east on antique monuments sculpted animals and written

⁶⁶ Folger Shakespeare Library, INC S554: Solinus (1480), 64r. This copy is discussed by Monique Hulvey in her article on marginalia in incunabula in the Folger Shakespeare Library: Hulvey (1998) 172–3.

underfoot, in Chaldean [i.e., Arabic or Syriac] letters, *Saraff*. In my time, in the year 1487, another camelopard was sent to Italy to Lorenzo de Medici of Florence by the sultan, and I saw it too in the forum along with a lion and many other beasts.⁶⁷

Another instance of curious responses to the *Polyhistor* text can be seen in a copy of the 1538 Basle edition (published by Michael Isingrinium), now housed at Duke University's Rare Book Library.⁶⁸ Here the owner, a Carlo Calcagnini (whether he is related to the Ferrarese humanist Celio Calcagnini I have not been able to determine) has added a series of annotations in which he reflects on the world in his own day in light of what he has read in Solinus.⁶⁹ On page 116, where Solinus describes an earthquake that occurred during the reign of Emperor Tiberius and destroyed twelve cities, after quoting directly Pliny as the original source of this story, Calcagnini glosses on a similar occurrence in his own day: 'In our day, which is the year 1544, in Candia (i.e. Crete), on this island many cities and mountains were destroyed by several earthquakes.'⁷⁰

Calcagnini, like many of his fellow Renaissance readers, questions what he reads from Solinus. In his section on Britain, Solinus describes the island of Thyle, an island far off the Scottish coast, beyond the Hebrides and Orkneys. Calcagnini appears unconvinced by the treatment, and points out that many believe its existence to be a fable, despite the fact that Petrarch makes mention of it in his letter to Tommaso da Messina.⁷¹

⁶⁷ Cyriacus was a humanist and antiquarian who died in 1453. He copied many inscriptions from ancient monuments and other structures in his voyages around the Mediterranean. I have not been able to locate any evidence of Cyriacus' noting of this specific inscription. A collection of Cyriacus' letters and diaries has been published under the title *Later Travels*, edited by Edward Bodnar: Bodnar (2003). These texts reveal that Cyriacus was a reader of Solinus, citing him with regard to the islands of Delos, Naxos, and Chios: Bodnar (2003) 158–60, 164, and 216. For Cyriacus' sketches of animals, see Saxl (1940–1). For more on Cyriacus, see Scalomonti (1996); Paci and Sconocchia (1998); Bodnar and Mitchell (1976); Bodnar (1960). The giraffe (or 'camelopard') owned by Lorenzo de Medici, a gift from the Sultan of Egypt, was a sensation in late fifteenth-century Italy, so much so that the humanist Angelo Poliziano wrote a eulogy for the giraffe: see Lloyd (1971) 52.

⁶⁸ Duke University Rare Book Library, E fS686P: Solinus (1538). Carlo Calcagnini wrote his signature on the frontispiece. Also appearing at the base of this page is a hand-written certification from a Dominican censor that the work did not pose a threat to church doctrine.

⁶⁹ On Celio Calcagnini, see Breen (1952).

⁷⁰ *nostro aevo hoc est anno a Christo nato MDXLiiii in Candia hoc est in certa insula multae urbes, montesque, aliquot terremotu corrumpunt*. There were significant earthquakes in Crete in 1531 and 1549. It is unclear which of them the glossator is referring to here. For a summary of serious earthquakes in the eastern Mediterranean in the mid-sixteenth century, see Ambraseys (1992) 263.

⁷¹ 65: *Thyle insula e oceani inter settentrionalem et occidentalem plagam ultra Britanniam, Hiberniam et Orchadas. Haec tamen multi fabulosa putant, de contra extat epistola petrarchae 27 lib iii* ['Thyle is an island in the region between the northern and western oceans above

Calcagnini's curious glosses extend into the text of Pomponius Mela's *De situ orbis*, printed here with the Solinus. Astride that text, cued by Mela's discussion of the geography of Thrace, he invokes the *Olynthiac Orations* of Demosthenes, pointing out that they had recently been translated by Cardinal Bessarion into fine Latin.⁷² And where Mela traces the Italian coastline, Calcagnini is reminded of the death and destruction caused by the incursion of the corsair Hayreddin Barbarossa at Porto Ercole in 1544.⁷³

Editing the *Polyhistor*

The extensive manuscript cross-referencing and evident concern for how Solinus relates to other texts discussed above were soon mirrored in print. In 1520 a novel edition of the *Polyhistor* first appeared from the print shop of Johannes Singrenius in Vienna.⁷⁴ Johannes Camers (Italian Giovanni Ricucci Vellini), an Italian theologian, who spent several decades teaching literature, philosophy and theology at the University of Vienna, provided in this edition a vast running commentary in scholia that line the margins of the text.⁷⁵ Camers' incredibly intricate scholarly apparatus (which often surrounds the text, as in a bible with Glossa Ordinaria) indicates other classical authorities that reference the same material. He cross-references

Britain, Scotland and the Orkneys. Nevertheless many consider it a fable, against which stands the epistle of Petrarch 27 Book 3']. The letter to which Calcagnini appears to be referring is *Epistole familiares* 3.1, *Ad Thomam Messanensem, de Thyle insula famosissima sed incerta, opiniones diversorum*. Thyle, and especially the expression *ultima Thyle* had long come to represent the edges of the known world. Theodore Cachey discusses Petrarch's self-fashioning as a geographic expert in 'Petrarchan cartographic writing' and shows that Petrarch's invocation of the semi-mythical Thyle was part of a tradition that stretched back to Virgil's *Georgics* and was passed down through Seneca and Boethius: Cachey (2003) 81–2.

⁷² 187: This Latin translation by Bessarion was first printed in 1471. In his preface to the oration, Bessarion drew a parallel between the threat of Philip of Macedon to Greece and the threat of the Ottoman Turks to Italy in his own day: see Bisaha (2006) 80–2.

⁷³ 198: *Olim Senensium portus, nunc n hoc est anno domini 1544 una cum portu Herculis a turcis duce Barbarossa, magna Christianorum ignominia, ac detrimento, combustus est* ['Formerly the port of the Sienese, now, that is in the year of our Lord 1544, together with Porto Ercole was burned by the Turks under the leadership of Barbarossa, to the great disgrace and detriment of Christians']. Mela makes no mention of *portus Herculis*, as Porto Ercole was only founded in the 19th century.

⁷⁴ Solinus (1520).

⁷⁵ Camers, as his Latin name suggests, was from Camerino. He taught philosophy at the University in Padua, moving to the University of Vienna in 1499, where he resided for many years, teaching literature, philosophy and theology. For more biographical information on Camers, see Cardinali (2004).

a bewildering array of Latin and Greek authors. These include Pliny and Pomponius Mela of course, but also Ammianus Marcellinus, Macrobius, Virgil, Ambrose, Euripides, Pythagoras and many others. This vast framework of scholia meant that Solinus' work itself came to be almost incidental, dwarfed by Camers' commentary. Camers' remarkable work of compilation was reprinted in at least two subsequent sixteenth-century editions.⁷⁶

In essence, Camers' extensive apparatus of notes amounts to an elaborate printed version of the painstaking handwritten efforts of Camillo Gradi on his copy of the *Polyhistor*. The extensive cross-referencing and proof-texting evident in the manuscript glosses of Gradi are reproduced, in even greater number, in Camers' printed notes. Solinus' text, thanks to Camers' efforts, was now corrected, cross-referenced and situated among the literature of antiquity; Camers had done potential glossators' work for them.

Renaissance editors were well aware that the *Polyhistor* was largely a condensation of Pliny's *Natural History*. The extent of Solinus' borrowings, in fact, became a considerable talking-point among editors of the *Polyhistor* in the sixteenth century. One point they consistently highlighted is the relative brevity of the *Polyhistor* in comparison to the *Natural History*. Amid the scepticism and disdain that the *Polyhistor* sometimes engendered, editors and readers offered recurring justifications for reading Solinus. A certain 'Thomas Grammarus', the owner of a copy of the 1473 Nicholas Jenson edition (now in the Huntington Library) appended in his own hand a defence of Solinus against those who accused him of 'not being sound of mind' because he described many things that no one had ever seen. Thomas pointed out that Cicero did much the same thing.⁷⁷ Similar sentiments are expressed in a preface by Bonino Mombrizio to the 1475 Milanese edition: 'Sweet and short of expression is the accessible Solinus that you are reading and he was indeed worthy to be read. He displays to everyone the whole world, with its peoples and teaches many things that are known

⁷⁶ Solinus (1543) and Solinus (1557a).

⁷⁷ Huntington Library, RB 104035: Solinus (1473). The annotator added his modest defence of Solinus in the page facing the beginning of the main text: 'I judge that they will not be in their right minds, Julius Solinus, those who slander you with no reason, you who describe with a sweet pen things on this earth that we had neither heard of or seen . . . First let them hear the rumors about Cicero's *De natura deorum* II; then let them discuss garrulously the things they perceive, judging whether by the cleverness of nature it happens that prodigious monsters are formed, or whether you yourself have placed them in this volume (?) . . . These things not even curious people by researching could discover in such numbers as really exist in the earth and in marshes and rivers – things whose existence we deny because we have not seen them.'

only to a few.⁷⁸ Here we see the case made both for the *Polyhistor's* encyclopaedic scope and for its comparative brevity.

The relationship of Solinus to Pliny remained a talking-point in material added to editions of the *Polyhistor* throughout the sixteenth century. Mention has already been made of Philipppo Beroaldo's comments in his prefatory epistle to the 1500 Bologna edition of the *Polyhistor*. He wrote that 'not long ago I reread and carefully corrected Iulius Solinus, whom we can rightly call the ape of Pliny'. In fact, Beroaldo was quite clear about how much Solinus' work was culled from Pliny: [he writes] 'indeed this work is almost entirely woven together with threads from Pliny; moreover almost every line is drawn from the appearance of Pliny'. But in Solinus' retelling, Beroaldo also saw merit:

He copies from Pliny's original work, especially making use of Pliny's majesty, but luckily with greater brevity; and he makes from Pliny's grapes wine no less glittering . . . in this Pliny's flavour and preserved sweetness of speech are embodied, and the palate restored to a remarkable extent and Solinus is, so help me God, in many ways distinguished; this work which he rightly entitled Polyhistor, was fashioned using the mirror of Pliny, in which he saw a somewhat smaller likeness of Pliny.⁷⁹

Beroaldo's comments thus confirm this important element of Solinus' continued popularity – its length relative to the tomes of Pliny. Similar sentiments in favour of Solinus' brevity appear elsewhere: 'Pliny tended to all of nature in many ways, entirely in the form that it was in his time. Solinus was the cultivator of a small plot of nature's ground – he picked flowers and roses from everywhere.'⁸⁰ The *Polyhistor* might be short and sweet, but it also covered a great deal of ground.

⁷⁸ Solinus (1475a): *Dulcis et eloquio brevis est Solino aperto quem legis et dignus nam fuit ille legi. Omnibus ostendit totum cum gentibus orbem et quae sint paucis cognita multa docet.* Bonino Mombrizio (1424–1500) was a humanist and hagiographer from Lombardy, and the author of *Sanctuarium seu vitae sanctorum*, which compiled over three hundred legends of saints. For biographical information on Mombrizio, see Foffano (1979) and Sannazzaro (1952).

⁷⁹ Solinus (1500): *Relegi nuper emendavique haud sane indiligenter Iulium Solinum, quem Plinii simiam nuncupare merito possumus . . . Quippe ex Plinianis filis totus fere contextitur, atque ex Pliniano colore omnia pene liniamenta ducuntur, hic Pliniano archetypo prope peculiariter usus; Plinianam maiestatem nec minus brevitatem foeliciter effinxit; fecitque ex plinianis racemis racemationem haud dubie florulentam. . . . In quibus Plinianus sapor et conditurae suaveolentiam spirant, nec non palatum mire reficiunt et mediussidius est Solinus multiplex varius luculentus; cuius opus de pliniano speculo formatum merito polyhistor inscribitur, in quo parva quasi quidam Plinii effigies convisit.*

⁸⁰ These are the words of Theodore Kaner, the Bishop of Cracow, in Solinus (1520): *Plynius excoluit naturam pluribus omnem/Informem vultu tempus adusque suum. Naturae parvis SOLINUS cultor agelli/Floribus e multis legit ubique rosas.*

Johannes Camers also chose to emphasise this and other potential benefits of Solinus versus Pliny. He writes that in imitating Pliny, Solinus has repackaged the universal in a small body, and in so doing he has copied the author in a fashion worthy of our consideration. 'Indeed,' he writes 'in this author you find here and there expressions of clarity that are largely absent in Pliny'.⁸¹ Then he goes on to list some of the things that you will find in the *Polyhistor* that have been added to what one gets from Pliny: the origin and dates of the founding of Rome; the origin and names of the inhabitants of Italian cities; information about Sardinia and its wonderful waters; the wonders of Sicily; a more detailed description of the British Isles; certain gems, snakes, animals and exotic trees, human rituals, and much else.⁸² 'And with what detail and elegance he describes the wonders of India,' Camers adds.

So many of the marvelous things of the earth fill up this little body, such that the work deserves the title *Rerum Memorabilium Collectanea*, which it is sometimes called . . . If anyone on the other hand faults Solinus for having himself borrowed from others (Terence himself would have the same opinion), then it must be said that nothing has been said to this point in time that has not already been said.⁸³

In this same edition (and in several later editions, including the Golding English translation), a *Solini Vita per Ioannem Camertem Edita* appeared, which offered a further defence of Solinus' text, pointing out that humanists such as Angelo Poliziano and Ermolao Barbaro had found it worthy of examination. Dionysius Periegetes interpreted him; Quintus Rhemnius Fannius incorporated Solinus' phrases into his poetry; Macrobius in his *Saturnalia* borrowed from Solinus' discussion of the Roman calendar; doctors of the church such as Jerome, Ambrose and Augustine all borrowed language from Solinus. But to call these authors apes of Solinus, Camers

⁸¹ Solinus (1520): *In eo siquidem authore, quem plerumque Plinio defuit, elocutionis claritatem passim reperies.*

⁸² Solinus (1520): 'Here it is agreed that Solinus has frequently added to Pliny much that it is worthy of knowing. Of the name, origin and times of the city of Rome. Of the division and intercalary days of the year. Of the origin, names and inhabitants of Italian cities, or in which time these cities were established. Of the inhabitants of Sardinia, and its strange waters. Of the wonders of Sicily. In Greece. Thessaly, Macedonia, Crete and other islands. In addition much is added by Solinus to Pliny's description of Britain . . . Certainly there are here [discussions of] snakes, gems, animals, and of exotic trees, of different human rites, of the cave of Corcyra, and many other things, which are not related by Pliny'.

⁸³ Solinus (1520): *Quam copiose, quanta elegantia, quove ordine Indiem miracula refert. Tot parvo hoc corpusculum orbis miracula complexus est, ut non immerito opus ipse suum Rerum memorabilium Collectanea/ inscribere constituerit aliquando. Si quis rursus culpae Solino dederit, quod haec quoque ab aliis ipse fuerit mutuatus, Terentia seipsum sententia tutari poterit. Denique (inquit) nullum est iam dictum, quod non sit dictum prius/saepeius repetunt.*

suggests, would be an affront to them. In a similar fashion, it would be unfair to call Solinus an ape of Pliny.⁸⁴

A similar defence of Solinus was made by Elie Vinet, in his preface to a 1554 edition of the *Polyhistor*. He acknowledges that Johannes Camers before him had pointed out how much Solinus owed to Pliny and that Ermolao Barbaro, in his *Castigationes pliniana*, had charged Solinus with being ungrateful to the memory of Pliny. He then writes that 'there are certain people whom I will refrain from naming who have called Solinus the ape of Pliny'.⁸⁵ He goes on to say that Pliny himself might be called an ape of the Greeks and Romans that he emulated, noting that Pliny did not acknowledge his own debts to Dioscorides. Vinet also stresses that there are

⁸⁴ Solinus (1520): 'Not only the latter writers (as Sipontius Perottus, Domitius Calderinus, Angelus Politianus, Hermolaus Barbarus, Ianus Parrhasius, and divers others such like, whom not without cause a man might account among the ancient writers) but Servius also in his second book upon Virgil's Husbandry, and Priscian, two of the six noble grammarians, have cited the authority of Solinus by name. Also the interpreter of Dennis (whether it were Priscian or Rhemnius) has oftentimes put whole sentences of Solinus in his verses. If I be not deceived, all that which Macrobius recites of the division of the year, and of the odd days, are Solinus'. Moreover, the Doctors of the Church, Jerome, Ambrose, and Augustine, and other Doctors also, have many times borrowed sentences word for word out of Solinus. There are some that term Solinus by the name of Pliny's ape, in like manner as Iulius Capitolinus, Plinius Caecilius, and Sidonius Apollinaris report that Titian was called the ape of the orators, and Arulenus the ape of the Stoics. But these men consider not that such are wont to be called apes, as they either report things written by others altogether in the same order without alteration, or else such as counterfeit, not the authors but their shadows. But Solinus has so followed Pliny's phrasing that (under correction be it spoken) there may scarce any other be found that has approached nearer to the majesty of Pliny's style.' This translation is based on that of Golding (1587), with modernised spelling. This same life of Solinus can be found in at least two later editions: Solinus (1538) and Solinus (1572), in addition to Golding (1587).

⁸⁵ Solinus (1554). The whole passage reads: 'But Johannes Camers, the editor of Solinus' *Polyhistor*, wants us to believe that Solinus for the most part drew all of his material from Pliny, but he is nowhere able to explain the line of transmission by which Solinus came by the material for this reason, because this brief work was published while Pliny was still alive (Pliny dedicated the *Natural History* to the Emperor Vespasian). Also before Camers had made his judgement, Ermolao Barbaro accused Solinus of being ungrateful to the memory of Pliny: and there are those, whom we will refrain here from naming, who seem to themselves to be doing something great and worthy of praise whenever they call Solinus the ape of Pliny. . . . Just as truthfully could not by the same reckoning Pliny be seen as ungrateful to Dioscorides and others, and be called an ape of many others, not only Latin but Greek, which he emulated. But, the Collectanea of Solinus, God willing, [they say], could not have been made without Pliny: but was it not permissible for Solinus to draw from the same sources from which Pliny drew his material. For my part it is easy to believe that Pliny was older than Solinus by some years; nevertheless Solinus was able to have access to things which are pretty well lost, all the writings of the heroes of the past, of which Pliny had made use, with the result that this work was not necessary for his writing nor was it necessary to read the book of Pliny, nor laud Pliny as the author, Pliny who was a new man and not yet having any authority among writers. Nevertheless, they allege, Solinus has borrowed whole sentences with the same or the same number of words as Pliny'.

many words, sentences and ideas that are new in Solinus' text; this was the case despite Solinus' considerably shorter length. This final point illustrates again the twin appeal of the *Polyhistor*: it could make the claim of being encyclopaedic in its coverage and yet remain brief. Did a work need to be exceptionally long to be encyclopaedic? Or could a shorter work actually be more appealing and/or useful?

The manageable length of the *Polyhistor* was surely one source of its appeal to Renaissance readers. It offered a brand of 'encyclopaedism lite'. Despite its brevity, it still managed to encompass the known world (or at least that known to the ancients) and the remarkable things found therein. Thus it could be manageably read through as a narrative geography, affording a global view and a host of interesting facts.

The maps printed in sixteenth-century editions of the *Polyhistor* further reflect the paradoxes of printing Solinus in this age. Cartography underwent profound changes in the fifteenth and sixteenth centuries. Ptolemaic geography gradually came to predominate and Europeans slowly and fitfully encompassed the New World within their mental horizons.⁸⁶ They had to determine whether to reject or accommodate Solinus and other classical authorities on geography amid these changes. An indication of the potential contradictions of such efforts can be seen in the 1520 Vienna edition of the *Polyhistor*.⁸⁷ Although Solinus naturally had no knowledge of the lands of the New World, the printer of this edition made the decision to include a grand, fold-out Ptolemaic projection of the world that includes a depiction of the extent of North and South America at that point known. The North American continent is marked as *terra incognita*, while South America is labeled as *America*. For many years, until the rediscovery in 1901 of the Waldseemüller map (first drawn in 1507) in a German castle, this was considered the earliest appearance of the word 'America' on a map.⁸⁸ On top of South America, the map reads 'in 1497 this land and the adjacent islands was made the province of America by Columbus of Genoa under the mandate of the crown of Castille'. The map also indicates in the southern portion of Africa that 'all this part of Africa was unknown to

⁸⁶ Ptolemy's *Geography* re-entered the intellectual circles of western Europe when the Florentine Jacopo Angelo de Scarperia brought a Greek manuscript from Constantinople. Angelo completed a Latin translation in 1410, and Ptolemaic projections became widespread. Fifteenth-century geographical scholarship was primarily concerned with synthesising the newly rediscovered information and methods contained in Ptolemy with traditional sources such as Solinus and Pomponius Mela: see, most recently, Berggren and Jones (2001).

⁸⁷ Solinus (1520).

⁸⁸ The Library of Congress completed its purchase of the Waldseemüller map in 2003. For a study of the major questions surrounding the composition of the map, see Harris (1985).

Ptolemy'.⁸⁹ The printer, Johann Singrenius, seemed unconcerned that the map did not correlate with the world known to the late antique author. He wanted his readership to appreciate the geographical and natural-historical observations of Solinus as a classical authority. But he also felt it necessary to incorporate the relatively new knowledge of the shape and scope of the world, as embodied in this map. The knowledge of the ancients was being leavened by the observations and discoveries of contemporaries.

An effort to incorporate the new geographic knowledge can also be seen in the slightly later (1538) edition from Michael Isingrinium in Basle that prints the *Polyhistor* and Pomponius Mela's *De situ orbis* together.⁹⁰ The publishers inserted a world map between the texts of Solinus and Mela – one that depicts the greatly expanded geographical awareness of the sixteenth century. The editor informs the reader in an adjoining note that the view that the map provided reflects the world as known in his day, rather than that during the lifetimes of the two classical authors. This is evident in the depiction of the Asian continent, where the continent's eastern shore is represented: 'In the present map, we have placed Asia as far as its extreme edge to the east, as in our own day it has been explored by men.'⁹¹

This same edition, which includes marginal commentary by Sebastian Münster, also includes regional maps printed amid the text of the *Polyhistor*. These largely follow Solinus' narrative, and include maps of Rome, Italy, northern Africa and Judea, among others. On page 48, however, a map appears of the region of modern-day Ukraine and European Russia. Labelled on this map are Livonia, Lithuania, Moscow, Riga and Novgorod, none of which are discussed by, or could have possibly been known to, Solinus. The closest Solinus gets is his discussion of Scythia, in which he mentions the Dneiper (Borysthenes) and other rivers that feed into the Black Sea. These examples reveal the potential for confusion in the interface between new and old geographic knowledge in a period of flux.

Conclusion

So what can we conclude from this sampling of manuscript annotations, editorial prefaces, and maps from the Renaissance reading history of Solinus'

⁸⁹ Anno d. 1497 haec terra cum adiacetibus insulis inuenta est per Columbum Ianuebsem ex mandato Regis castellae America provincia . . . Tota ista pars Africae Ptolomeo erat incognita.

⁹⁰ Solinus (1538).

⁹¹ 150: Asiae ab oriente in praesenti tabula adiecimus extremam oram, ut a nostri aevi hominibus est explorata.

Polyhistor? The evidence bespeaks an intellectual atmosphere of ambivalence. I am willing to suggest that this discussion of Solinus in the first hundred or so years of print demonstrates two important features of intellectual life in Europe in the period. Firstly, the cache of ancient learning carried considerable weight until a late date, even in areas that would come to be identified as scientific. Solinus, as a representative of antiquity, remained, as Philippo Beroaldo declared, ‘in many ways distinguished’. He was a totem of an age that many early modern readers thought worthy of emulation. The rebirth of interest in antiquity extended into a fascination with the many Roman encyclopaedists who seemed to have succeeded in encapsulating all the world and the knowledge in it. Much of the fascination was undoubtedly with language, vocabulary and nomenclature: Solinus, like Pliny, was a repository for knowledge of the ancient world – even if it was wrong – and thus worthy of philological dissection. That Solinus was of a manageable length, a light lunch compared to Pliny’s seven-course repast, only helped, and was clearly an attraction. Rather than a reference work, it appears that the *Polyhistor* was still designed to be read cover-to-cover, as a narrative geography of the known world.

Secondly, the choices made by printers and editors in the way that they presented the Solinus text – that is, how they prefaced the text, what they published it with, and what supporting apparatus they provided – reveal that this was a period of flux, where Europeans were trying to undertake an accommodation between the old authorities and the new data accumulated by explorers and observers of the natural world. Many scholars, perhaps most notably John Elliott and Anthony Grafton, have shown that there was an ‘extraordinary reluctance’ to incorporate such new material into the European geographic consciousness.⁹² Robert Mayhew has demonstrated that the important transformations in geographic thinking were late in coming; prose geographies such as that offered in the *Polyhistor* retained their importance even into the seventeenth century.⁹³ It is hard to get away from the impression that some Renaissance readers, like medieval readers before them, read Solinus’ text with the belief that they really could gain information about the geography of the world and the wonders that inhabited it. This does not mean that they read it uncritically, as we have seen, but works like the *Polyhistor*, which (we might assume today) should have been obsolete, continued to be read. In the years that would come the speculative narrative geography of Solinus would be superseded, but only very gradually, by mapping based on measurement and mathematical

⁹² Elliott (1970) 14. ⁹³ Mayhew (2001).

reckoning, and his fable-laden depictions of the natural world would be transcended by empirical observation and recording with the emergence of natural history as a discipline. But it was not until the second half of the sixteenth century that we see the European appetite for the *Polyhistor* subside.

This tension between respect for classical authority, even in areas such as geography, astronomy and botany, and the fitful beginnings of an empirical attitude, made the Renaissance a period of paradox.⁹⁴ As Neil Rhodes emphasises in [chapter 21](#), it was a time in which the old coexisted with the new. One place we see this is in the emergence of natural history as a discipline. This transformation is the subject of an excellent recent study of natural history in the Renaissance by Brian Ogilvie. Ogilvie points to the promotion of the attentive study of the natural world and appreciation of natural beauty among humanist scholars.⁹⁵ In the long term, the humanists' distinctly non-scientific interest in classical works on science did provide added impetus for the farther-reaching and more important changes in the study of science. Gradually, and only very gradually, empiricism and new discoveries would transplant the claims of the ancients. Through their interface with nature, naturalists 'came to pose questions and demand answers for which the ancients' texts no longer provided guidance'.⁹⁶ The Renaissance practitioners of natural history, in Ogilvie's formulation, by the end of the sixteenth century created a new discipline that engaged in a 'science of describing', in which observation and description could far surpass the knowledge of the ancient authorities.⁹⁷

It is telling, however, that Ogilvie does not mention Solinus a single time in his book (although Pliny is well represented). It has been suggested here that there is considerable evidence that Solinus' work was actually preferred by many readers to Pliny, largely on account of its brevity. Judging from the continued popularity of Solinus among publishers, the *Polyhistor* remained in demand until at least the middle of the sixteenth century, after which the printed editions of the work dried up. The story Ogilvie tells is one in which the likes of Solinus are steadily displaced by empirical practitioners. Ancient texts were 'not crutches', writes Ogilvie, 'they were tools. When the tools proved no longer useful, naturalists found or invented others.'⁹⁸

⁹⁴ For the enduring appeal of encyclopaedism into the early modern period, see Grafton (1985).

⁹⁵ Ogilvie (2006) 105. Other recent and useful works on Renaissance natural history include Findlen (1994) and Freedberg (2002).

⁹⁶ Ogilvie (2006) 28–9. ⁹⁷ Ogilvie (2006) 139.

⁹⁸ Ogilvie (2006) 29. Peter Whitfield, by contrast, sees the Renaissance as a period almost bereft of scientific innovation, identifying Copernicus in the mid-sixteenth century as the first

This appears to track with the fate of the *Polyhistor*, although there clearly remained a readership for Solinus well into the age in which natural history had become a ‘science of describing’. Gradually, early modern readers began to regard texts such as Solinus’ in a fashion not all that different from the way we do today, as a window into antiquity and what its inhabitants believed, rather than a guide to the world around us.

There might have been another factor that contributed to the declining fortunes of the *Polyhistor*. In [chapter 18](#), Ann Blair describes the late Renaissance as a great age of describing, recording and saving data of all sorts – a process of stockpiling that resulted in a proliferation of ‘reference works’ that acquired great popularity. This ‘encyclopaedic info-lust’, as she describes it, fed a waxing desire to be comprehensive in coverage. It is possible, although beyond the scope of this essay, that this trend might help explain the decreasing appeal of abridgements like the *Polyhistor* toward the end of the sixteenth century. This desire for bigger, more universal treatments, along with an increasingly empirical spirit in understanding the natural world, might just have driven Solinus out of favour.

If I might formulate it in a slightly different way, as Solinus (and to a lesser extent Pliny) ceased to be reliable guides to nature, they also ceased to be ‘experts’ and became instead repositories of interesting facts and stories. The process by which Solinus’ text would fade into the obscurity in which it now finds itself, only to be rescued occasionally by well-meaning academics who are surprised at how often they find copies of the *Polyhistor* in rare book libraries, was already afoot in the observations of Renaissance readers that I have discussed above. The scepticism is already there. MS. 21 in the Walters Gallery, a twelfth-century manuscript copy of Solinus’ text, is copiously annotated in a humanistic script that is probably the work of its fifteenth-century owner, Francesco Accolti d’Arezzo, the noted humanist scholar and philologist active in Naples in the mid-fifteenth century. Francesco does not hesitate to express his disagreement with the claims of Solinus – *non*,

indication of a shift taking place: Whitfield (1999) 113. George Sarton describes the Renaissance view of science as follows: ‘It was a literary and worldly approach instead of being experimental and matter of fact. It took scholars an astonishingly long time to discover that science could not be investigated profitably in any book except the great Book of Nature’: Sarton (1955) 5. For the emergence of scientific attitudes in the realms of zoology and botany, see Findlen (1999). The profile of the *Polyhistor* among natural historians in the sixteenth century almost certainly mirrored that of Pliny’s *Natural History*. Charles Nauert has shown that while Pliny was taken seriously as an authority on nature at the outset of the fifteenth century, by the century’s end his work was of interest largely to philologists: Nauert (1979).

accompanied by frequent finger pointers, is scattered liberally about the margins of the text.⁹⁹

Similarly, the scepticism of the fifteenth- or sixteenth-century owner of a copy of Theodorus de Ragazonibus' 1491 edition, now housed at Yale, is plain. He writes at the conclusion of the text of the *Polyhistor* that *non credentur esse Solino scripta auctori gravi, cum ridicula multa ad sint*. ('[I don't believe] this writing of Solinus to be of a serious author, with much of it being laughable'.)¹⁰⁰ Boffile de' Giudici, the annotator of the North Carolina manuscript described above, expressed his own scepticism with tongue wedged firmly in cheek. In response to a section in Solinus he has read, he added *credat Iudaeus Apella, non ego*, 'let the Jew Apella believe it, not me', a reference to Horace's *Satires*, Book 1, Satire 5.¹⁰¹ It is an appropriate by-line for the future that awaited the *Polyhistor*.

⁹⁹ Walters Art Museum Library, MS W.21. For the catalogue entry on this manuscript, see Randall (1989) Cat. 10. For more on Francesco Accolti, known in his day as the 'Prince of Subtleties', see Anon. (1960).

¹⁰⁰ Yale University, Beinecke Library, MS 1977-835: Solinus (1491) 41v.

¹⁰¹ Davis Library, MS. 13, 144r: see Dover and McDonough (2011).

World orders

Shakespeare, according to John Dryden, 'needed not the spectacles of Books to read Nature', so it would seem a perverse undertaking to try to track down the encyclopaedias he might have consulted when writing his plays. There is, however, a great deal of natural philosophy in Shakespeare's work, either prominently on show in set-piece speeches (Hamlet: 'What a piece of work is man') or embedded in poetic metaphor, and this was not imbibed with his mother's milk. Academics themselves have taken different views of the level of Shakespeare's learning. In Dryden's own day and for much of the eighteenth century he was regarded as something of an ignoramus. The most polemical statement of that kind came from Richard Farmer, Master of Emmanuel College, Cambridge, who argued in his *Essay on the Learning of Shakespeare* (1767) that it was absurd 'to treat him as a Learned Man' when he was guilty of 'the most gross violations of History, Chronology, and Geography'.¹ Modern academics on the other hand have produced so many textual sources for Shakespeare's knowledge that he can at times seem more of a Casaubon than an untutored bard. The purpose of the present chapter is not to add to that reading list, nor to argue for a more or less learned Shakespeare: any literate person may use an encyclopaedia. What I want to do instead is to describe the different kinds of encyclopaedic text available in England during the sixteenth century, in particular those that were most accessible to Shakespeare, and then to suggest how these different ways of conceptualising and transmitting knowledge worked in conflict with each other to create a performance of knowledge in Shakespeare's theatre.²

If we start from the premise that an encyclopaedia is a store of universal knowledge, and that it therefore represents an idea of how the world is organised, then the most obvious point to make about the sixteenth century, in the story of encyclopaedism before the Enlightenment, is that it is the last

¹ Vickers (1974–81) vol. 5, 260.

² I am much indebted here to West (2002). However, with the exception of some excellent discussion of *Hamlet* at 122–31, West is not particularly concerned with Shakespeare and I shall be pursuing a somewhat different line of argument from his.

age of the old Ptolemaic system which had offered a model for imagining the order of nature since antiquity. The transition between old and new scientific mindsets is focused particularly on the cusp of the sixteenth and seventeenth centuries, the period of Shakespeare's writing life, and just after. John Donne wittily observed, when he got out of bed after his near-fatal illness, that he was 'a *new Argument* of the *new Philosophie*, That the *Earth* moves round'.³ Earlier, however, perhaps around 1600, he had been perfectly happy to imagine his bedroom as the fixed centre of the universe, the earth, around which the sun busily moved, waking up young lovers such as himself ('The Sun Rising'). Donne was certainly a more learned writer than Shakespeare, at least in the conventional academic sense, apologising to his readers on one occasion for the 'multiplicity of not necessary citations'.⁴ But you did not have to be especially learned to be aware of the Copernican system in England in 1600, because it had already entered that most popular of publications, the humble almanac. As early as 1576, when Thomas Digges inherited his father Leonard's almanac business, a heliocentric picture of the world was reaching the pocket of the man in the street. Thomas had decided that his father's old diagram of the geocentric model was now out of date and a new one showing 'that the Earth resteth not in the Center of the whole world, but . . . is caried yearely rounde aboute the Sunne' would have to replace it.⁵

The almanac might be regarded as an encyclopaedic text of the most reduced and digested kind, setting out the basic coordinates of time and space as well as providing the astrological information that was still taken seriously by mathematicians such as Thomas and Leonard Digges themselves and by polymaths such as John Dee. Almanacs were used by all and sundry, and though some of the people who issued them may have been scholars, most of their users obviously were not. It is highly probable that Shakespeare would have bought almanacs, and he also knew Thomas Digges' son Leonard, who wrote one of the commendatory verses for the First Folio, but there is no means of knowing what his views were on the Copernican and pre-Copernican systems. The shift in people's perception of how the universe was organised was very gradual; there was no sudden point of enlightenment. Simon Forman, who kept a diary recording some of the original performances of Shakespeare's plays, published a defence of the Ptolemaic system in 1591 called *The Groundes of Longitude*. As late as the 1630s the 'syncretic' poet Phineas Fletcher was using the ideas of

³ Donne (1987) 133. ⁴ Donne (1987) 62.

⁵ Digges (1576) sig M1r. Thomas's addition to the almanac, *A Perfit Description of the Celestiall Orbes* is the first English translation of Copernicus.

macrocosm and microcosm as the basis for his world picture.⁶ Yet long before then the newer model of the universe was being published in the most popular almanacs, such as those issued by Thomas Bretnor.⁷ Literature is perhaps particularly slow to show evidence of new scientific thought because poetry and drama rely so heavily on a stock of inherited imaginative material. Though the knowledge base had altered, such material still retained symbolic appeal.

So Elizabethans, the literate at least, were obliged to hold in mind simultaneously two quite opposite ideas about how the universe was ordered, one traditional and very elaborately documented and the other uncharted and pointing towards highly uncertain territory. What is perhaps surprising is not so much that poets found the older version the more rewarding imaginative resource, but that new publications which presented themselves solely as storehouses of knowledge, with no literary pretensions, could consist largely of centuries-old material, despite the fact that the new order was clearly visible in the average person's astrological pocket-book. The most striking instance of this is the one vernacular, English-authored work published during Elizabeth's reign which is indisputably an 'encyclopaedia', however narrowly we define that term. This is the book known as *Batman upon Bartholomew*, which came out in 1582, when Shakespeare was 18, but which was not in any sense a 'new' publication. The work is essentially the encyclopaedia compiled by Bartholomaeus Anglicus in the thirteenth century and translated into English by John of Trevisa in 1398. Printed by Wynkyn de Worde in 1495, it was revised and reissued in 1535 by Thomas Berthelet, and finally, nearly half a century later, with further revisions and additions, by Stephen Bateman (or Batman), who used Berthelet as his copy text.⁸ This last version is the book that is sometimes described as 'Shakespeare's encyclopaedia'.⁹

Batman upon Bartholomew is organised hierarchically, as we can see from the 'Generall Table' at the start. The first half is devoted to God and mankind, progressing from the Trinity through the angels, the soul (vegetable, sensible and rational) and the human body, to end up with diseases and remedies. The second half is concerned with the physical world, beginning with 'What the world is' and continuing through the astrological

⁶ On Fletcher's *The Purple Island* see Sawday (1995) 170–82.

⁷ See Capp (1979) 191–9. ⁸ Schäfer (1976) v–vi.

⁹ See, for example, Cormack and Mazzio (2005) 116–17, which reproduces the flyleaf of a copy with extensive manuscript additions of local knowledge by the owner, c. 1600. Bateman's work may have come to be called 'Shakespeare's encyclopaedia' because of a copy with a forged signature on the title page; see Se Boyar (1920) 168–89, cited from West (2002).

signs, the planets, the elements, birds, geography and topography, and then (reversing the traditional hierarchy) minerals, plants and beasts. The 'Generall Table' is followed by another table highlighting some of the principal topics, which include 'the place of imagination', 'taking heede of matching with an uncleane Stocke', 'Of Athens', 'The originall of the Amazons', and 'mans lyfe is comprehended in seaven triumphs', billed as an 'addition'. Throughout the text Bateman helpfully signposts these additions and a list of new sources appears at the end of his 'names of the Authors to this Booke'. There are extensive references to Thomas Cooper's Anglo-Latin thesaurus of 1565, which Shakespeare also seems to have used. Other additions cover Paynell's translation of Nicholas Massae on syphilis, entries on birds and beasts from Conrad Gesner, plants and minerals from Paracelsus, maps and geography from Ortelius, astrology and magic from Cornelius Agrippa, and a final section on colours which reflects Bateman's own interest in the art of limning. In the manner of other medieval encyclopaedias, fact mingles happily with fiction. Some of the highlighted topics certainly have intriguing Shakespearean applications and scholars have detected various other borrowings: for example, the effect of the moon's rays on the brain as a cause of madness (*Measure* 3.1.23–5; *Othello* 5.2.107–9); the geometric properties of the soul (*Lear* 1.1.73); earth as a storehouse of 'nature's germen' (*Lear* 3.2.8); wild men and other hybrids as models for Caliban; wrinkles affecting the eyesight of the elderly (Sonnet 3).¹⁰ There is also a tenuous personal connection in that the dedicatee of *Batman upon Bartholomew* was Henry Carey, first Baron Hunsdon and patron of the theatre company Shakespeare worked for in the early 1590s. None of this is conclusive, but if Shakespeare did own an encyclopaedia – and in view of the enormous diversity of his subject matter it would have been a very useful companion – then this would almost certainly have been it.

There was, however, at least one other work of encyclopaedic scope available to Shakespeare in English and this was Pierre de la Primaudaye's *French Academy*, translated first by Thomas Bowes in 1586 and then reissued in various expanded editions involving other translators through to 1618. The evidence for Shakespeare's use of La Primaudaye is actually more extensive than it is for his use of Bateman and was set out at length by John Erskine Hankins (Hankins stated unequivocally that Shakespeare had read both La Primaudaye and Bateman).¹¹ La Primaudaye is also different from Bateman in various ways. In the first place, his is essentially a modern compilation,

¹⁰ Hankins (1978) 28, 68; Baldwin (1952) 237–41; Moses (2005); Burrow (2000) 90–1. References to Shakespeare are to Shakespeare (1999).

¹¹ Hankins (1953) 119.

first assembled in 1577, rather than an inherited text with modern additions. It was also, in its original incarnation, a work of moral philosophy: the contents page of the first volume reads rather like a series of essays by Montaigne or Bacon, with entries on friendship, duty, riches, marriage, seditions, the happy life and so forth. The moral content is delivered through the fiction of a humanist dialogue conducted by the four young gentlemen who constitute the 'academy'.¹² But La Primaudaye went on to add three further volumes, two of which make the finished work look much more like a traditional encyclopaedia: Book 2 covers the human body, virtues, passions, and diseases; Book 3, the creation, the planets, elements, plants, animals and minerals; Book 4 then offers the Christian philosopher's guide to life. It should be noted here that La Primaudaye was a Huguenot and Bateman an avid Protestant, so in both cases traditional material passed through the filter of reformed religion for an English audience. It seems very likely that Shakespeare was part of that audience. Hankins located sources in La Primaudaye for Shakespearean passages on the world as a stage and the infant's cries at birth (*As You Like It*; *Lear*); the internal struggle, with its imagery of bridles and reins (*Othello*); the sleep of death and its unknown country (*Hamlet*); the unweeded garden (*Hamlet* again); the 'little moment' and love the preserver (Sonnet 15) – to select some of the more persuasive examples. It is scarcely possible to disentangle these from all the other sources from which they derive, but the cumulative evidence produced by Hankins builds a good case for Shakespeare's use of La Primaudaye.

What is striking about this work in an encyclopaedic rather than a Shakespearean context, however, is the way in which La Primaudaye combines modern features such as the humanistic, ethical framework with a distinctly medieval world-view. Central to this is the age-old principle of analogy, which has been eloquently described by Anne Lake Prescott, who points out that if the human body is a microcosm, then it 'lives in a nested set of analogies that includes the encyclopaedia itself'.¹³ What lies behind this is the idea that nature is a book written by the hand of God, a metaphor that can be traced back at least as far as the *Didascalion* of Hugh of St Victor; La Primaudaye himself explains that 'the holy Ghost doth often propound vnto us in holy scriptures this whole visible world as a great book of nature'.¹⁴ The idea provided poets with a vast store of correspondences (the sun as a king and so forth) that could be drawn upon for almost any subject; and if the world is a book, then an encyclopaedia which attempts to provide a record

¹² It is, however, unlikely that La Primaudaye is the source for the 'little academe' of *Love's Labour's Lost*; see Woudhuysen in Shakespeare (1998) 67.

¹³ Prescott (2000) 160. ¹⁴ La Primaudaye (1618) 333, quoted in Prescott (2000).

of everything that is in the world is also a literary reference tool, a thesaurus of similitudes. So the principle of analogy gives special significance to the role of the encyclopaedia as a writer's companion in the sixteenth century, but it does the same for readers too, and this is as true for Bateman as it is for La Primaudaye. Bateman's prologue to Bartholomaeus spells out his intention that the book should help readers understand both the scriptures and classical literature:

All these properties of things be necessarie and of great valew, to them that will be desirous to understand the obscurities or darknesse of holy scriptures, which are given to us under figures, under parables and semblance or likelihoode of things naturalle and artificielle . . . Devout doctors of Theologie or Divinitie, for this consideration, prudently and wisely read and use natural philosophie and morall, and poets in their fictions and fayned informations, unto this fine and end, so that by the likelihoode or similitude of things visible, our wit or our understanding spiritually, by cleere and skilfull utteraunce of words, may be so well ordered and uttered, that these things corporalle may be coupled with things spirituelle.¹⁵

The ultimate effect of all this is thoroughly to confuse *res* and *verba*. It is convenient to distinguish between the dictionary or lexicon as a book that explains words, and the encyclopaedia (the book of the world) as one that describes things, but the idea that the world *is* a book elides the boundary between them.¹⁶

Bateman and La Primaudaye have the best claim to be described as 'Shakespeare's encyclopaedias', but there is one other sixteenth-century book that is certainly encyclopaedic in scope though not something that we would readily call 'an encyclopaedia'. This is Barnabe Googe's translation of Palingenius' poem, *Zodiacus vitae*. Written in Italy in the 1530s, the poem offers a general survey of knowledge gathered under the twelve astrological signs. When the Catholic church placed it on the index of proscribed books it attracted the attention of Protestants, and Googe translated the first three books in 1560, extending this to six books in 1561 and completing the translation as *The Zodiacke of Life* in 1565; there were further editions in 1576 and 1588. The full-text English version gives as its remit on the title page 'the whole compasse of the world' and comes with an elaborate index of topics, one of which is 'Stage of mans life'; the passage to which this refers has the marginal gloss in the 1576 edition, 'The theatre or stage of

¹⁵ Bateman (1582).

¹⁶ On the distinction between dictionary and encyclopaedia see McArthur (1986) 102. On the relationship between *res* and *verba* see Merrills in chapter 14 on the *Etymologiae* of Isidore of Seville. Interestingly, Isidore was one of Bateman's principal sources and he obtained a tenth-century manuscript of the work in 1574; see Parkes (1997) 125–56.

mans life'.¹⁷ There are, of course, many other possible sources for Jaques' speech 'All the world's a stage' in *As You Like It* (and similar comparisons at *The Merchant* 1.1.77–8 and *Lear* 4.6.176–7), but the attraction of this one is that Palingenius was used as a school text in both Latin and English in Shakespeare's youth.¹⁸ This was the Elizabethan children's encyclopaedia. It is also one of the very few known sources to combine the world-as-stage theme with that of the ages of man.¹⁹ Other Shakespearean borrowings from Google's Palingenius have been detected, and its classroom role makes it a likely source of general knowledge for many writers of the period. But it was also admired by Thomas Digges himself,²⁰ pioneer of the Copernican almanac, which brings us full circle, as it were, back to the great cosmological shift of the late sixteenth and early seventeenth centuries. For a time at least, the time when Shakespeare was writing, old and new science could coexist.

Oral tradition, rhetorical resources

While the sixteenth century was the last age of the old, analogically constructed order of the world, it was also the first age of print, a fact of perhaps equal importance in the story of encyclopaedism before the Enlightenment. Since any account of what an encyclopaedia is must address matters of knowledge-storage and transmission, it is clear that the question of media will be integral to our understanding of encyclopaedism more generally. This has become more obvious since 1990 with the birth of the World Wide Web and the discontinuation of the print version of the most famous of modern encyclopaedias, the *Encyclopaedia Britannica*. There are, indeed, parallels to be drawn between the last decade of the twentieth century and the close of the sixteenth century, but the point I want to emphasise here is that while it is evident that a discussion of the encyclopaedia in history will involve some discussion of the media, it is not the case that media evolve in a straightforwardly linear fashion. Old media are not simply discarded and replaced by new media, nor do new media necessarily act as a vehicle for fuller and more accurate gatherings of knowledge. Print certainly helped to disseminate new ideas in the sixteenth century, including those of Copernicus, but, as we have seen in the case of the encyclopaedias of Shakespeare's youth, the press was also responsible for giving a new lease of life to

¹⁷ Palingenius Stellatus (1576) 194. ¹⁸ See Watson (1908) 73. ¹⁹ See Hankins (1953) 21.

²⁰ Gabriel Harvey recorded that 'M. Digges hath the whole Aquarius of Palingenius bie hart'; Harvey (1913) 161.

centuries-old world pictures that were almost at the point of expiry. Conversely, where in the sixteenth century feedback from readers to printers was used to produce editions of more modern encyclopaedias 'newly enlarged and corrected', in our own era the phenomenon of user-generated content is responsible for information banks such as Wikipedia where interested parties are able to manipulate the presentation of controversial material. In both ages new media help to promote new knowledge but at the same time produce a backwash of old error.

The other point, that new media do not merely supersede old media, but coexist and cross-fertilise, is certainly apparent in the early print era. It is well known that the lay-out of the first printed books resembled manuscripts, before they developed their own set of conventions. But it is less often remarked that some of the earliest print projects aimed to preserve even older media in the form of oral tradition. Print was immediately recognised as a convenient new way of preserving and circulating collections of knowledge, and the oldest of such collections took the form of sayings. So it was not only the medieval manuscript encyclopaedias that were translated into the new medium, but also the more ancient collections of knowledge, distilled into proverbs and other kinds of saying and handed down by word of mouth.

The point is illustrated by Caxton's activities at the dawn of the print era in England. He learned the art of printing at Cologne where he worked on books produced by the 'Printer of S. Augustinis de Fide' in 1471–2, including a Latin edition of Bartholomaeus' *De Proprietatibus Rerum*.²¹ This is recorded by Wynkyn de Worde, Caxton's successor in the printing business he subsequently set up at Westminster, at the end of his own edition of Bartholomaeus in Trevisa's English translation. Caxton had moved to Westminster in 1475–6 to concentrate on the English market, and one of the first books he published there was the translation by Anthony Wydeville, Earl Rivers, of the *Dicts and Sayings of the Philosophers*. This was an elite publication, not folk wisdom for the masses (an elegant manuscript version was also made as a presentation copy for the king²²), but similar collections became extremely popular as the trade in printed books expanded. William Baldwin's *A Treatise of Morall Philosophie, containing the sayings of the wise* (1547) was one of the most successful publications of the early modern period, going through twenty-four editions to 1651. Many other collections of proverbs and sayings appeared throughout Europe in the first century of print. From its inception, the new medium reached back to the origins of knowledge itself, and also to the oldest medium of all, speech.

²¹ See Hellinga (1999) 66, 96.

²² See Backhouse (1999) 270.

The most ambitious of these collections was Erasmus' great humanist project, the *Adagia*. This started life as a relatively modest work of 150 pages, prepared for his English patron, Lord Mountjoy, and published in Paris in 1500; a new and very much larger version was published in 1508 by Aldus in Venice, and Erasmus continued to revise and expand the *Adagia* for the rest of his career, the last edition appearing in 1536, the year of his death. But that was not the end of the project. Other scholars added to Erasmus' work to produce ever more elaborate and comprehensive editions, the limit being reached in the Basel *Adagia* of 1574 which added 647 pages to Erasmus' 852, from an extraordinary variety of different sources, and with indices for topic and author as well as for the adages themselves.²³ While the *Adagia* is not an encyclopaedia in the sense that Batman or La Primaudaye is, it is nonetheless a work, in its various forms, that has encyclopaedic characteristics.²⁴ In the first place, the proverb itself, and collections of proverbs, preserve knowledge in capsule form; along with other oral formulaic techniques they represent what Eric Havelock has termed the 'storage language' of preliterate societies.²⁵ Size is not an issue when estimating the knowledge value of a proverb, as Erasmus points out in his introduction to the *Adagia*.²⁶ So sixteenth-century scholars were eager to repackage this very old storage language in the very new storage medium because they recognised its intrinsic value in terms of knowledge content. However, Erasmus and other humanists had a second reason for working on proverb collections, which was to do with the immense importance they attached to rhetoric. The *Adagia*, vast though it became, was only part of a much wider rhetorical support system covering techniques and resources for persuasive speaking and, increasingly, writing. Since the goal of rhetoric was to enable its exponent to express himself, and sometimes herself, on any imaginable subject, the huge compilations of rhetorical resources that rolled from the early modern printing press certainly had encyclopaedic pretensions. Here again *res* was confused with *verba*, not in the manner of the medieval Book of Nature but in a more modern belief that a world of words provided the means for language to work *in* the world as an instrument of power.

What we have in the sixteenth century, in fact, and what Shakespeare inherited, are two knowledge traditions: one fluid, oral and rhetorical, though now translated into print; the other fixed and symbolic of a universal

²³ See Barker (2001) xxiii.

²⁴ Rita Severi writes that 'the Erasmian sententiae must be considered a part of the personal encyclopaedia of every cultivated Elizabethan': Severi (1998) 93.

²⁵ Havelock (1991) 24–6; and cf. Morgan in chapter 5. ²⁶ See Erasmus (1982) 9–14.

order, though now under pressure from 'new philosophy', as Donne termed it. These two traditions were fundamentally inimical to each other, since it is the function of rhetoric to marshal its quasi-encyclopaedic resources in support of a particular point of view – indeed, *any* point of view – in contrast with the totalising belief in a static world order that was hostile to rhetorical open-endedness and the scepticism it inevitably fostered. The new print medium, then, supplied the old oral arts with resources at the same time as it gradually eroded people's dependence upon the skills themselves, just as, in a parallel process, it helped to perpetuate ancient ideas about the order of nature at the same time as it was disseminating the new knowledge that would eventually sweep them away. In Shakespeare's lifetime, when the modernising effects of print were still not fully apparent, it lent its support promiscuously to these two competing forms of encyclopaedism.

Negotiating between these two mutually opposed knowledge traditions is the commonplace book. A good deal has been written about this kind of compilation and its methodology in recent years in the context of early modern education and literature. Its significance here is that it is possible to assign it to both traditions. Since its principal function was as an aid to composition, with useful quotations filed under different headings for easy retrieval, it would appear to be very much a rhetorical resource. Readers could construct their own commonplace books or purchase one of the large printed Latin tomes such as the *Polyanthea* or the *Poetarum flores*, which Shakespeare himself may well have consulted.²⁷ In either case, the commonplace book works as an agent of a fluid and performative knowledge tradition. On the other hand, as Ann Moss has pointed out, many 'proponents of commonplace books concluded that the places, or heads, into which the books were divided were not at all arbitrary or conventional, but did indeed represent [as Melanchthon put it] the "forms and rules of things deep-seated in nature"'. On that basis, she continues, '[w]hole encyclopedias were modelled on commonplace-book taxonomy', which some regarded as 'rhetoric's Book of Nature'.²⁸ So it is possible to see the commonplace book in a quite different light, as part of that other tradition in which knowledge is represented as a fixed and universal order of nature. In this final formulation, however, where the commonplace book is presented as 'rhetoric's Book of Nature', these rival traditions seem paradoxically to be combined, which Moss explains by pointing out that it is the role of rhetoric to rewrite the Book of Nature so as to reveal its diversity rather than its symbolic

²⁷ See Rhodes (2004) 154–5.

²⁸ Moss (1993) 54, 58.

design. The effect of this is to make the commonplace book the vital mediator between two kinds of encyclopaedic knowledge in a way that has a direct impact on literary composition in the sixteenth century. And with regard to encyclopaedias, it also helps us to understand why it is so difficult to distinguish between knowledge of things and knowledge of words in this period.

The performance of knowledge

As far as Shakespeare himself is concerned, while we may be able to demonstrate his familiarity with various kinds of encyclopaedic text, it is important to remember that his plays were performed in a theatre which itself had encyclopaedic characteristics. The relationship between theatres and encyclopaedias in this period has been extensively studied by William N. West, who reminds us that the term ‘encyclopaedia’ appeared in the late fifteenth century, not long before the first theatres since antiquity were being built in Europe, and argues that they both helped to conceptualise each other in the early modern period. Encyclopaedic works with titles presenting themselves as theatres of the world by scholars such as Ortelius, Zwinger and Boaistuau were published before James Burbage erected a building in Shoreditch in 1576 called ‘the Theatre’.²⁹ This process of exchange between theatre and encyclopaedia provides the basis for one of West’s principal arguments, which is about fixity and fluidity: Renaissance theatres helped to change the conception and representation of knowledge from that of a static, objective entity, something out there and fixed, to an idea of knowledge as performance, something dynamic. In this respect, the encyclopaedia’s self-presentation in the early modern period is different from that in the periods both before and after: before, when it was conceived as ‘a frozen echo of the world’,³⁰ to borrow West’s elegant phrasing, and after, in the Enlightenment, when it resumed its status as a fixed and ordered representation of the world outside it.

What I want to do here is to develop the point about the fixity and fluidity of knowledge in relation to Shakespeare and his theatres in a slightly different way. It is easy to see how the name ‘the Globe’ would have been understood as a metaphor for universal knowledge, and it seems likely that the name ‘the Theatre’ had similar associations.³¹ It has also long been

²⁹ West (2002) 45. ³⁰ West (2002) 2.

³¹ See van den Berg (1985) 33, citing Dekker’s *The Gull’s Hornbook*.

established, though not much commented on nowadays, that the structure of Shakespeare's theatres was microcosmic. Alvin Kernan, for example, has described it as 'obviously a model in plaster and wood of the conservative world-view of the late Middle Ages'.³² The title of Kernan's article alludes to Hamlet's speech on the 'sterile promontory' of the earth and the 'excellent canopy the air', which now seems to him 'foul and pestilent' (2. 2. 285–300). There is a cue here ('look you') for the actor to point to the theatrical 'heavens', the painted starry ceiling of the roofed part of the theatre, just as there is in *The Duchess of Malfi* when Bosola says to the Duchess, 'Look you, the stars shine still' (4.1.99). He may also have pointed to the thrust stage at his feet (the 'promontory') and to the below-stage hell (or purgatory), the 'cellarage' to which his father's ghost has returned in 1.5. There are also other obvious structural features that represent the political order, such as the pillars of state upholding the canopy, behind which the throne would have been set at the back of the stage. We should not labour this residual symbolism of Shakespeare's stage too much, but we should remember that it was there, nonetheless, visible at every performance of every play. While that symbolism cannot have the same significance for a modern audience, frequent visitors to the new Globe theatre on Bankside will be aware that its unchanging structure also dominates the visual experience of each production in a way that is quite unlike the experience of any other theatre today.

The reason why the microcosmic structure of Shakespeare's theatre has been so little mentioned in recent years is because it carries the taint of the 'Elizabethan world picture', the conservative world-view outlined by E. M. W. Tillyard and routinely derided in the New Historicist criticism of the 1980s and 1990s.³³ In fact, encyclopaedism in general might be said to have lain dormant as an issue in English studies during this period, and particularly in Shakespeare criticism, after its long exposure from Tillyard through to the accounts of the theatre as symbol in the 1970s. With the coming of the New Historicism, world pictures were superseded by genealogies of power. But there is an irony here in that the latter development can be attributed principally to the influence of Foucault, who was himself responsible for the world picture outlined in *Les mots et les choses*, though it went by the more intellectually respectable name of the Renaissance *episteme*. In his subsequent work Foucault continued in this philosophical and

³² Kernan (1974) 2.

³³ See Tillyard (1943), which presented a view of nature and society as a ranked and stable order, to which all Elizabethans were said to subscribe. Attacks on Tillyard's work are too numerous to mention.

theoretical vein to provide quite different, politically radical readings of early modern culture. What I am arguing here is that the radical effects which are certainly a pervasive feature of Shakespearean drama are better understood in rhetorical and practical terms as something produced by the conflict between two forms of encyclopaedism, or knowledge tradition, within the theatre itself. It is true that Copernicus and the incipient scientific revolution also provide a context of ideological instability, and they are part of the picture of this moment in English cultural history, but for Shakespeare this is probably less important than the fact that his plays are rhetorical constructs which were performed within the boundaries of a surviving natural order, fragile though it may have become by the end of the sixteenth century. What this means is that we are constantly witnessing in Shakespeare a tension between the visible and legible order of the symbolic stage, and the encyclopaedic text which is mirrored by it, and the various kinds of performance which destabilise these apparently fixed structures of knowledge.

This kind of tension is most obvious in plays where characters interact with the physical environment of the theatre, as Hamlet does, setting the reassurance of its 'goodly frame' at odds with a sceptical rhetoric which claims that 'there is nothing either good or bad but thinking makes it so' (2.2.244–5). But the contest I am describing also operates within the text and not simply between theatrical space and spoken word. This is also evident in *Hamlet*, where world-picture commonplaces such as the body as garden and the sleep of death are framed by a deliberative rhetoric that calls into question the purpose of life itself ('To be or not to be').³⁴ And we can see a similar contest or interplay between the encyclopaedic and the rhetorical, conservative and more radical knowledge technologies, in many other Shakespearean plays. The ability of the commonplace to negotiate between these two models, which I remarked on earlier, is illustrated throughout *King Lear*, as Paul Hammond's subtle account of the functions of *topos* in the play has demonstrated.³⁵ In *Troilus and Cressida* we are presented with what is probably the most famous 'encyclopaedic', set-piece speech on the order of things in the whole of Shakespeare, Ulysses' speech on 'degree'. This is fondly quoted by conservative politicians as evidence of Shakespeare's belief in a hierarchical world order, but David Norbrook has deftly shown how Renaissance defences of natural analogy, such as this one, should be

³⁴ Latin versions of 'to be or not to be . . .' are recorded as set topics for debate at Edinburgh University in the early 1600s; see Frye (1984) 188.

³⁵ See Hammond (1991) 78–129.

read rhetorically, arguing for a fundamental distinction to be made between rhetoric and ideology.³⁶

I want finally to illustrate my own understanding of how the competition between two versions of encyclopaedism works in Shakespeare by looking at two speeches from plays whose early scenes present situations of political crisis. I do not want to comment further on the theatre itself, since that remains the same, while the ideologies invoked by Shakespeare's characters vary from play to play. One play which undoubtedly dramatises an ideology under pressure is *Richard II*, the first of the second tetralogy of English history plays, where Shakespeare shows us the sweeping away of an old medieval order, nostalgically evoked in John of Gaunt's 'This England' speech. In harmony with this, Richard constantly invokes the ideology of divine right and of a natural order in which his role is analogous to that of the sun, king of the planets. (This is an analogy that would have worked even better in a post-Copernican universe if the scientific revolution had not disposed of analogy as a legitimate way of understanding the workings of nature.) The sun was in fact Richard's personal badge, and he plays with this at various points, most strikingly in the speech on 'the searching eye of heaven' at 3.2.33. At the beginning of *1 Henry IV*, as England descends into civil war, Hal echoes the image in the soliloquy which sets out his own strategy of self-promotion:

Yet herein will I imitate the sun,
Who doth permit the base contagious clouds
To smother up his beauty from the world,
That when he please again to be himself,
Being wanted he may be more wondered at
By breaking through the foul and ugly mists
Of vapours that did seem to strangle him.

(1.2.175–81)

The sun arising from the clouds was the badge, or banner, of the Black Prince, Richard's father and Hal's forbear, so Hal seems to be appealing to an active and heroic role-model here. But this is image-management in more senses than one. His choice of the term 'imitate' suggests a cynical manipulation of what Richard took to be the natural order of things, and the ideology is then fatally undermined by his second recourse to analogy later in the speech:

³⁶ See Norbrook (1994) 140–64.

So when this loose behaviour I throw off
 And pay the debt I never promised,
 By how much better than my word I am,
 By so much shall I falsify mens hopes;
 And like bright metal on a sullen ground,
 My reformation, glitt'ring o'er my fault,
 Shall show more goodly and attract more eyes
 Than that which hath no foil to set it off.

(1.2.186–93)

On the face of it, this is a reworking of the same image, but on closer inspection it turns out to be the exact opposite of the original. In the first image the sun is claimed to be the essential self, temporarily masked by the clouds; here, it becomes the superficial, golden exterior, set upon 'a sullen ground'. As Norbrook has observed, analogy may be used rhetorically as well as ideologically, citing Erasmus' *Parabolae* as an example.³⁷ That is certainly what is going on here, but what is also at work in this second analogy is another kind of oral resource – the proverb or adage – for underlying the analogy is the familiar saying, 'All that glitters is not gold'. Proverbs have the specious air of eternal verities, but are in fact extremely malleable. In this case, where Richard appeals to a cosmic image in order to reinforce what he believes to be the natural order of the world, Hal uses the same image as a flexible, rhetorical tool to demonstrate the very opposite: that our identities, and our place in the world, are always constructed.

Running in parallel with the symbolic suns of *Richard II* is the ideology of 'the body politic', the metaphor of the state as an organic unity, which is no longer viable in the altered world of *Henry IV*.³⁸ In the Christian context of the earlier play this takes the form of a belief in the king's body as the *corpus mysticum*,³⁹ but this is an ideology that does not require theological underpinning in order to have a political function, as Shakespeare demonstrates in the very different environment of *Coriolanus*. The last of the tragedies, written in 1608, *Coriolanus* is set in the early Roman republic at a time of extreme political instability, when Rome is not only at war with the Volscians but also under threat of civil insurrection. At the outset of this play, a mutinous crowd of starving citizens confronts the patrician Menenius, who invokes the natural analogy of the body politic in order to reassert the political status quo. The political order, he tells them, is like a body in which

³⁷ Norbrook (1994) 142–3. ³⁸ See Hutson (2001) 66–78.

³⁹ The concept is extensively discussed in Kantorowicz (1957). Shakespeare criticism has generally used (and misrepresented) Kantorowicz to show that the commonwealth is personified in the body of the monarch in Renaissance drama. For a reappraisal see Hutson (2009) 63–142.

the patricians represent the belly and they, the plebeians, the unruly limbs. The latter rebel against the belly, accusing it of idleness and the hoarding of food, but Menenius then presents the belly's own reply:

'True is it, my incorporate friends', quoth he,
 'That I receive the general food at first
 Which you do live upon, and fit it is,
 Because I am the storehouse and the shop
 Of the whole body. But, if you do remember,
 I send it through the rivers of your blood
 Even to the court, the heart, to th' seat of th' brain . . .'

(1.1.119–25)

The principal source here is North's Plutarch (and Livy), but Shakespeare also draws upon a tradition of English encyclopaedism, since he can be shown to have consulted John of Salisbury's *Policraticus* and Camden's *Remaines*.⁴⁰ But despite the accumulation of authority here, the analogy is clearly dysfunctional, not least because the consuming patrician belly is the source of the citizens' grievances in the first place. That it is so is also apparent from the wider political and rhetorical contexts of the play, which subject all ideology to extreme moral relativism. This is summed up by the Volscian Aufidius in his cool appraisal of the play's flawed, patrician hero: 'So our virtues/Lie in th'interpretation of the time', a verdict that echoes the scepticism of Hamlet's 'there is nothing either good or bad but thinking makes it so'. That speech ends with four terse proverbs:

One fire drives out one fire, one nail one nail;
 Rights by rights falter, strengths by strengths do fail.

(4.7.49–50, 54–5)

Shakespeare may have found 'one nail drives out another' in the first book of Erasmus' *Adages* (1.2.4). Here it quite literally hammers home a message that instead of metaphors of concord, stable hierarchy and organic unity, history gives us a process of competition, replacement, redundancy, and the constant rewriting of the order of things.

Both the analogy between the sun and the king and the metaphor of the body politic have the status of commonplaces and therefore have the potential to operate either as reflections of a fixed, natural order or in more radical ways. They are pushed in one direction or the other by the extent to which they work in partnership with other kinds of rhetorical and argumentative resource. The organic image of the state in *Coriolanus*

⁴⁰ See Shakespeare (1976) 38.

might in fact be taken as an extreme example of the negotiability of the commonplace. One of the less well-known sources for Shakespeare's image is William Averell's short book called *A Meruailous Combat of Contrarities*, published in 1588 at a time of acute political crisis, when England was under threat of invasion. Averell presents a dialogue between the tongue, the hand, the foot and the belly, where the belly has the last word, as in *Coriolanus*, claiming 'I will refreshe your fainting members . . . so shall our amitie in a natural harmonie be maintained'.⁴¹ But the context of the speech could hardly be more different. Despite the apparently rhetorical title of Averell's work, its intentions are deeply conservative, allegorical and ideological, as the 'application, brieflie declaring the summe of this Dialogue' makes abundantly clear:

This excellent frame and most beautifull order of visible things in the worlde, this position and placing of bodies, the heavens, the aire, and the earth, environed and spread about with the great Ocean . . . is called among the Grecians *makrokosmos*, a greater world, or more excellent beautie . . . which frame beareth in his naturall harmonie, an apt similitude of a politique magistracie . . . In this order we know there is a continuall *Sympathie*, no shew of contrarietie.⁴²

This sounds like Hamlet without the disillusionment, and it is a kind of encyclopaedism that also seems very remote from the world Shakespeare gives us in *Coriolanus*. There, Menenius' intended application of the same dialogue is radically undermined by 'contrarities' which cannot be resolved as easily as they are in Averell's passionate appeal for national unity.

The Globe theatre had as its motto 'Totus mundus agit histrionem', which Curtius thought was derived from John of Salisbury's paraphrase of Petronius in the *Policraticus*, reissued at Leiden in 1595.⁴³ This has become familiar to many readers as the inert anthology piece on the seven ages of man from *As You Like It* ('All the world's a stage . . .'), which has other encyclopaedic resources, including Bateman, as we have seen. But the world-view that such a tag suggests is far from stable. The Elizabethans really did have a world picture, but they also had the resources to deconstruct it; and we can indeed see Shakespeare's dramas as encyclopaedic, but in a way that draws upon two very different forms of encyclopaedism. The performance of knowledge that it offers is one that presents a dynamics of play between these two traditions.

⁴¹ A[verell] (1588) sig C4v. ⁴² A[verell] (1588) sigs C4v–D1r.

⁴³ See Curtius (1953) 140–1.

Dugdale's drainage and the dregs of England

CLAIRE PRESTON

In his memoir *Istanbul* (2005), Orhan Pamuk describes an encyclopaedia of his city, the Borgesian, multiple-volume project of the eccentric Reşat Ekrem Koçu – an undertaking so vast that at the time of his death Koçu had only reached the middle of letter B. This incomplete encyclopaedia, written between 1944 and 1951, contained the wildly eclectic range of its author's interests and obsessive digressions into cultural ephemera: it was full of historical anecdotes, fantasies of the city's Ottoman past, accounts of sensational unsolved crimes, and meditations on the extreme beauty of certain Turkish boys; a daring rescue at sea sat on the page next to an entry on a certain local species of plum. Pamuk recalls that encyclopaedia as a staple in his childhood reading, a treasury of good stories, fascinating information, riveting illustrations, and spicy tabloid details. He discusses this forgotten and massive work, and its heroic author, in order to dilate on the melancholy disarray and purposelessness of post-Republican Turkey, and to represent the anxieties of a too-suddenly 'westernised' Middle Eastern state in what he calls 'the innocent optimism of a man who thought he could take a form which took centuries to develop in Europe and, in his own haphazard fashion, master it in one fell swoop'.¹ The *Istanbul Encyclopaedia* – as typical reading matter in Pamuk's youth in the 1950s as old copies of *Punch* or *The Readers' Digest* have been with us – is, poignantly, long since out of print, obtainable second-hand only in odd volumes, and sold for less than the price of wastepaper. Whatever it was that made this work so popular at mid-century, it no longer speaks to the Istanbul of today; its imaginative landscape – the thousand-and-one-nights rendition of one of the oldest cities in the western world – is essentially lost. Perhaps, as Pamuk suggests, modern Istanbul no longer requires, or believes, the semi-mythic record of itself to be found in Koçu's *Encyclopaedia*.

Encyclopaedic works often, if inadvertently, codify their subjects in these local and historically specific ways. In second-hand bookshops and untouched elderly private libraries can sometimes be found curiosities to

¹ Pamuk (2005) 167.

delight the antiquarian: a handbook of European military aircraft silhouettes, a Victorian compendium of dishes in aspic, a vade mecum of the language of flowers. Like the old Shell Guides from the early 1950s, which idealised a heavily rationed and austere post-war Britain with soft-focus watercolours of rosy-cheeked families in brightly coloured Austins equipped with bulging picnic baskets, such encyclopaedic works, even if they have ceased to have practical value, nevertheless alert us to the concerns of earlier times; and those we no longer use may still be profitably read. They tell us how the nature of knowledge has changed: the encyclopaedia that catered to a now-obsolete category of ignorance or use is discarded by a general extension in understanding, change of fashion, or extinction of need.² It caters also to local and chronologically specific ideologies, and in particular to national identity.

Pre-Enlightenment English encyclopaedias exemplify this variety and flexibility of scope and emphasis; and they too demonstrate the innate obsolescence of such compendia: for example, James Primerose's *Popular Errors in Medicine* (1639) has little to offer modern pharmacopoeia, William Camden's *Britannia* (1585) has been superseded by the Victoria County Histories for sheer density and accuracy of information, and Thomas Browne's encyclopaedia of mistaken ideas, *Pseudodoxia Epidemica* (1646), has become a curiosity – not, alas, because we are less ignorant, but because we believe in a new set of errors nowadays. Although many more such works have become, like the *Istanbul Encyclopaedia*, mere wastepaper, some fall into an interesting category of writings whose original encyclopaedic range and structure is no longer necessary to what Thomas Elyot, in 1531 the first user of the term 'encyclopaedia' in English, called 'the circle of doctrine'³ but whose significance as literary or social or historical relics persists.

Elyot defined the encyclopaedia as 'a heap of all manner of learning' (although he does not assign the term to a *book* but rather to a system of knowledge). Encyclopaedic works of the sixteenth century did not usually style themselves as such, and 'encyclopaedia' as a descriptive title or generic literary term appears in England only in the 1630s. That the word in either sense – as concept and as genre – was imported into the language at that moment indicates the rising necessity of such learned productions to the late Renaissance; and early-modern England, a swiftly developing nation-state, required encyclopaedias and similar compendia to explain itself to

² Neil Rhodes's essay in [chapter 21](#) discusses in more detail the impact of historical locus on encyclopaedic content and structure.

³ Thomas Elyot (1537) *The Boke Named the Governour* 1.13. On the history of the term 'encyclopaedia', and of the Renaissance development of the genre, see Blair's essay in [chapter 18](#).

itself. Early-modern English encyclopaedias were often produced for overtly nationalist, polemical purposes, and engaged in the intensely topical question of England. John Selden's *Jani Anglorum* (1610), for example, traces the history of English common law; Richard Verstegan's *The Restitution of Decayed Intelligence in Antiquities* (1605) describes the Teutonic origins of early English history, and resurrects the lost language of Anglo-Saxon.⁴ Elyot's sense of the 'heapedness' of potential encyclopaedic material is a quality that various imposed rubrics and structures were designed to master; in England, that mastering encyclopaedic impulse is often related to the emerging sense of national identity in the social and linguistic origins that the antiquarians were working to extract from the unruly traditions of myth and superstition.

William Dugdale calls his *History of Imbanking and Drayning of Divers Fenns and Marshes both in Forein Parts and in this Kingdom, and of the Improvements thereby* (1662) not an encyclopaedia but 'a Fenne History';⁵ it is, like Camden's *Britannia*, Drayton's *Poly-Olbion*, and the various seventeenth-century perambulations and antiquarian county histories, a chorography – a topographically descriptive catalogue of places and localities arranged not by the alphabet but by the map, a paper journey through a variety of geographical, social, and historical landscapes as a method of establishing legal precedent. Like the chorographies, and like Selden's and Verstegan's, Dugdale's is a nationalist, formational work whose literary, rhetorical features are indistinguishable from its meaning and purpose. In the manner of Selden, Dugdale delivers the legal history of land-use and property rights, and like Verstegan's emphasis on linguistic and national origins, he insists on ancient precedent for the drainage project he promotes. Verstegan's preface to *Decayed Intelligence* forcefully insists on its primary purpose as a service to his country in elucidating its Saxon history;⁶ and Dugdale's intentions are covert, but there is nothing neutral about *Imbanking and Drayning*: it is a polemical, political undertaking.

Imbanking and Drayning was commissioned by a group of London-based adventurers, mostly prominent figures in the Commonwealth regime, who in the 1650s had completed huge drainage operations to improve parts of fenland East Anglia and Lincolnshire, and particularly the large area

⁴ Verstegan uses the words 'dictionary' and 'thesaurus', and refers to Jean Bodin, the French encyclopaedist, suggesting that he was well aware of the rising genre of the compendium; 'The Epistle to Our Nation', in *The Restitution of Decayed Intelligence* (Verstegan (1605), [†4^v]).

⁵ Dugdale to Thomas Browne, 17 November 1658; *The Works of Sir Thomas Browne* (Browne (1964) 4, 309).

⁶ Verstegan (1605) [†3^v – ††1^r].

within it known as the Great, or (later) the Bedford, Level. The total fenland area altogether – about a million acres – included the Great Level covering parts of Northamptonshire Cambridgeshire, Norfolk, Suffolk, and Huntingdonshire (the main project of the 1650s), the Lindsey and Deeping Levels near the Wash, the Hatfield Level and the Isle of Ancholme (or Axholme), and several smaller fens in Lincolnshire. The Great Level itself, an irregular area of more than sixty by thirty miles with islands of raised land at Ely, Ramsey, Swavesey, and Welney, extends east to west from the edge of Suffolk at Mildenhall to Peterborough and the Huntingdonshire borders; and from north to south from Wisbech and Downham Market to Waterbeach, just downriver from Cambridge. Drainage in such a landscape, which was the size of the whole of the Netherlands in the seventeenth century, required huge earth-moving and the diversion of waters. Banks, leams, drains, washes, and sluices were built or extended, and extensive surveying and dredging was required. It was the Big Dig of early-modern England, an epic technological and financial undertaking which foreshadows the exploits of Robert Moses in twentieth-century New York or Dubai's creation of territory in the sea in more recent decades. In its scope and financial foibles, the history of the fenland drainage project even has a peculiar resemblance to that of the Channel Tunnel in our own day.

The Great Level drainage was completed in 1653, a more or less successful end to fifty years of mismanaged attempts by the political and royal establishment. The company which had backed it most lately – subsequently established formally as the Bedford Level Corporation in 1657, with permanent rights of levy on the works – was in difficulties. Its legal relations with local landowners were doubtful; with the peasants they were catastrophically bad. Customary fishing and gathering rights and the use of the waterways had been ignored or destroyed, and the local population was frequently impoverished owing to the high-handed imposition of new works which spoiled their livelihoods, by the reallocation of land and redrawing of boundaries, and by the employment of Dutch workers who undercut English wages. There had been violence against the works and threats against the labourers, requiring the protection of troops. The enormous capital outlay by the shareholders was in danger if the profits on the works could not accrue. Even though the draining was complete, the drainers needed the continued support of the political and financial establishment to shore up their ill-sorted position and prevail against local interests.⁷ The undertakers had manipulated the law and called in military protection when this

⁷ For a detailed account of this situation, see Willmoth (1998) 296–7.

was protested. After a vigorous pamphlet war, at last they resorted to the stolidity of an encyclopaedia to consolidate their position with their rich, often aristocratic, London backers. It was a record of drainage which, in its comprehensive chronological and geographical range, and even in its typographical presentation, constituted an unassailably learned, painstakingly documented, and authoritatively precedented body of knowledge whose purpose was to hedge the drainage of England with patriotic Englishness. That they should have chosen William Dugdale – a royalist associated with conservation rather than redevelopment – as publicist for a project with such immense amounts of political and financial capital at stake, was a clever, even audacious, move.

The *History of Imbanking* is a sturdy folio, not lavish in comparison with some of Dugdale's other, more sumptuously illustrated works (for example, *Monasticon Anglicanum* and the *History of St Paul's* both contain many plates by Hollar, paid for by subscription). Dugdale was essentially a self-publisher, raising funds for and putting his own money into almost all his publications. *Imbanking and Drayning* was, however, heavily subsidised by the Bedford Level Corporation, in whose interest it was written. Its print run is unknown and is now difficult to establish because much of the edition, stored in Dugdale's house, was destroyed along with other stock in the fire of 1666;⁸ however, because the work was in essence designed as company propaganda, sufficient copies were needed as gifts to clients and persons of influence.⁹

Even more than the fugitive ideal of completeness, it is the authority of an encyclopaedia that is its foremost component. It must be believed to be true and trustworthy even if it cannot ever be comprehensive.¹⁰ Such authority is always in some respect constructed: it consists not only in verifiably correct information, but also in the active assertions and rhetorical manipulations of the author, who can insist by various means on his own reliability. Dugdale achieves this authority in several ways in his history of drainage. On the title-page of *Imbanking and Drayning* he advertises that his material has been 'extracted from Records, Manuscripts, and other Authentick Testimonies'.¹¹ He was already famous for a number of other encyclopaedic works based almost entirely on archival and on-site research,

⁸ Graham Parry estimates that *Monasticon Anglicanum* had a print run of 1,000, and this number is probably a reasonable one also for *Imbanking*: see Parry (2002) 184.

⁹ See William Hamper (1827) *The Life, Diary, and Correspondence of Sir William Dugdale*, diary entries for 20 May 1659; 2 February 1660; and June 1660.

¹⁰ On the ironies of encyclopaedic comprehensiveness, see West's essay in [chapter 23](#).

¹¹ Dugdale (1662) *The History of Imbanking and Drayning*, title page.

including *Monasticon Anglicanum* (1655–73) and *The Antiquities of Warwickshire* (1656). Like many of the most celebrated English antiquarians of this period, he had a keen, essentially modern, sense of documentary evidence, and had rummaged out thousands of charters, ordinances, court records, treaties, letters-patent, parliamentary acts, and royal edicts, to trace the history of property from the earliest post-Roman records to the seventeenth century.

The apparently disinterested resort to documents in *Imbanking and Drayning* is, however, not only authoritative but defensive on Dugdale's part: the history of titles and of property rights was potentially dangerous to both sides during the turmoil of the years of Personal Rule, the civil wars, and the Protectorate: the local landed gentry and even the aristocracy had already suffered at the hands of Charles I's minions, especially Strafford, who ransacked old charters and agreements to resurrect ancient obligations to the king; the same class were fearful of the discovery in their own backgrounds of illegitimate lineage or tainted inheritance. As Chester Herald of Arms during the period when he was gathering his materials and writing the book, Dugdale was by default intellectually conservative and politically a Royalist, although according to recent scholarship it seems he had much more contact, and patronage, among the Commonwealth ascendancy than he could easily acknowledge in his autobiography, written during the Restoration.¹²

In doing his research for *Imbanking and Drayning*, Dugdale must therefore have found his position awkward. Not only was he a specialist in what might be called 'salvage' history – the careful recording of buildings and institutions, in the form of encyclopaedic works of detailed documentary learning, against the broils of his own period, and against time itself – rather than in outright corporate propaganda, but he was assisting London-based government and foreign projectors who were expropriating land in remote districts as part of their business venture, a doubtful version of eminent domain (compulsory purchase), which was inimical to the customs of hereditary assets. The ideological contradiction cannot have escaped his notice: as an antiquarian who had in previous works charted the hereditary rights of property and honours (one of his major later works was a baronage of England), in *Imbanking and Drayning* his antiquarian research told against his own political sympathies and the interests of his usual clients; and yet it was by another irony the very class which had been most injured

¹² Willmoth (1993) 290–1.

by Charles' practices that was now performing those same injuries, with Dugdale's assistance, against their fellows in the landowning gentry of East Anglia and their tenants, the Fenmen. There is no doubt that Dugdale knew exactly what his research amounted to, whom it served, and whom it injured.

If Dugdale's purpose in the magisterial *Monasticon Anglicanum* had in part been to salvage a history of land-title associated with the dissolved monasteries (a subject that was largely undiscussed in Tudor and Stuart England by a gentry and aristocracy which had gained so much from the Reformation but did not necessarily wish to be reminded of the actual processes by which they had done so), his other purpose was, more urgently, to make a record of the existing churches and cathedrals of England which were once more under threat, this time from warring armies and enthusiastic iconoclasts. And this supreme archival excavator and documentary historian, the antiquarian's antiquarian, was no cobwebbed drudge locked away among his muniments. In gathering information for the *Monasticon* he had ridden all over the country with an artist in tow, frantically noting the built landscape and directing the artist's sketches, some of which, such as the engraving of St Paul's, remain the only detailed record of buildings that perished in the upheavals, or in the Great Fire. As one of the king's heralds during the Civil Wars, he was sent to demand the submission of the garrisons at Banbury, Warwick, and Coventry; and he was present at the battle of Edgehill. If there could be said to be a heroic age of antiquarianism, this was it, and Dugdale is its exemplary figure.

English chorography

Although its researches were carried out in the rather quieter years of the late Commonwealth, *The History of Imbanking and Drayning* is no less heroic than the *Monasticon*. It is a scholarly tome, containing the most recondite of archival and historical information and the fruits of very extensive fieldwork, which traces the history of draining projects from the creation of the world to the present day – itself a standard trope of scholarly and moral authority. Dugdale refers drainage to the Old Testament: after the section on God's own two drainage projects (the separation of the waters under heaven on the third day, and the abating of the deluge), he narrates the mythical undertakings of the Egyptians, Babylonians, and Greeks; the rather more plausible ones of the Romans; and at last the visible ones of the modern Netherlands and lowland Germany.

Less heroic, however, is the commercial impulse of *Imbanking and Drayning*. Although heavily veiled in Dugdale's exhaustive scholarship and by his sense of the deep propriety of traditional English civil custom, this history is in fact designed in part to *overcome* custom, persuade investors, override rightly disgruntled local landowners, accrue royal favour, and advertise to the investing and property-owning elite an engineering and thus an economic triumph. Because this purpose governs its style and narrative structure, its rhetorical operations are far more pointed than those of equally partisan works such as Camden's *Britannia*, Weever's *Ancient Funerall Monuments*, or Evelyn's *Pomona*, to name a very few of the diverse patriotic encyclopaedias of the late Elizabethan and Stuart eras. Dugdale's task is to show that drainage in general, and of the Great Level in particular, has an almost teleological inevitability in the history of national well-being, but he has to achieve this in a way that obscures the true history of the project. The often underhand dealings practised by the rich investors on the local owners and users of the fens, many of whom gleaned their living from the common land or who owned small parcels which were essentially stolen from them, are not discussed. That the undertakers 'pretended they had the consents of the Countries to be drayned by them, which alwaies hath been the ground of their cheat from the beginning', that the investors drained their own lands by 'the drowning of [their] neighbours',¹³ and (even more damaging, perhaps) that the new drains were poorly designed and made the fens 'ten times more hurtfully surrounded then before' are intractable truths hidden from view in this triumphalist account.¹⁴ Instead, Dugdale's solution to these discomfiting facts is to construct an encyclopaedic narrative leading us chorographically through other drained districts with a sometimes wearying inevitability, so that by the time we reach the special topographical features and history of the Great Level we are ready to subscribe to the necessity of drainage, the technical success of the project, and the assertion that it now contributes to the greater good of the whole commonwealth and not just to the coffers of the rich speculators who financed the scheme.

Imbanking and Drayning begins with a fulsome dedicatory letter to Charles II, in which Dugdale hopefully authorises drainage as a virtuous national undertaking by reminding the sovereign 'not only, that divers Great and Mighty princes . . . have in Forein Parts been active in Works of this kind: but how much your Majestie's own Royal Ancestors have by several excellent and wholesome Laws promoted the like in this Kingdom'.¹⁵

¹³ Anon. (1653) *The Anti-Projector or the History of the Fen Project* 1–2.

¹⁴ John Maynard (1650) *The Pick-Lock of the Old Fen Project* 14. ¹⁵ Dugdale (1662) [A1^{v+r}].

The first successful large-scale attempt to drain a part of the Great Level, Dugdale explains, was organised by John Morton, the bishop of Ely in the late fifteenth century, who supervised the cutting of a dyke from Peterborough to Wisbech, still known as Morton's Leam, which drains and contains some of the tidal river Nene. Bishop Morton had brokered the marriage of Henry VII to Elizabeth of York, thus concluding the Barons' Wars in 1486; he was, as Dugdale reminds Charles, 'the principall Instrument of that happy Union betwixt the two Houses of *York* and *Lancaster*', subtly connecting drainage to propitious royal occasions, from the installation of the Tudors to the restoration of the Stuarts. The marriage, which ended the only other major internecine war in England, is likened to the two newly linked substantial fenland towns. This canny analogy, in which Morton's place in political history is inscribed in the landscape itself, boldly gives drainage an unimpeachable pedigree of civil and national success after times of trouble.

As well as the various injustices which the drainers inflicted, what Dugdale also conceals is that the eventual success of the Great Level project in fact owed virtually nothing to the king's father or grandfather. The early Jacobean scheme had been poorly funded under the Lord Chief Justice, John Popham, and was in any case strongly opposed by local interests; the Caroline effort, led by the fourth earl of Bedford in the early 1630s, engaged Cornelius Vermuyden, the famous engineer and drainer, but foundered nevertheless. Although Charles I was still trying to reinvigorate the scheme in 1637, it was resisted as an abuse of royal prerogative, and widely disparaged for its outrages. Afterwards groups of dispossessed fenlanders managed to repossess, by 'diverse insolenicies', land acquired by the drainers. The Cromwellian syndicate completed it only with a drainage act in 1649 and an enormous inflation in cost.¹⁶ In 1662, in other words, Dugdale insinuates what is effectively a fictional royal lineage for drainage. Whether in reference to the Wars of the Roses or to the Civil Wars, he constantly makes such selective or augmented political readings of this built landscape.

Dugdale politicises the landscape: the act of drainage, like other, later enclosures, is political in its purposes and consequences. His account is of course heavily biased in favour of draining. It was (as he points out approvingly) essentially a form of enclosure, the landscape completely reconfigured to improve its agricultural output and value. As with all enclosures, local opposition to these works was based on well-founded grievances: lands had to be requisitioned by force and by legal legerdemain, and some rivers

¹⁶ Willmoth (1993) 90–2; also Willmoth (1998) 287.

became unnavigable in order to allow the artificial waterways to function. Traditional industries were threatened, and violence ensued. The projectors patriotically insisted on the benefit to England of improving so much arable acreage consisting of unusually rich silty soil, ideal for crops of many kinds. That this vaunted benefit necessarily inconvenienced and even despoiled some individuals of their lands and livelihood is a civil problem that the book justifies but only partly confronts.

The various draining projects had in the mid-1650s produced a pamphlet war as well as poems for and against the projectors. An anonymous drinking song of 1656 accuses the drainers of drying up the kingdom to the detriment of English beer; the Dutch are the villains in the piece because they had accepted low wages for manual labour on the works, and because of the avaricious brilliance of Cornelius Vermuyden, the architect of English drainage; these Dutch invaders are thirstily drinking up the waterlands; the North Sea itself is imagined as a kind of Dutch engine for sucking the land, and by extension, the cellars, dry.¹⁷ In another poem, the collapse of the Wisbech bridge (possibly in the great sea flood of 1655) is blamed on ‘the upstart-sluice that put/ Our aged bridge to’s Crutches’.¹⁸ ‘The Powtes Complaint’ specifically addresses the dire economic consequences of drainage: the traditional livelihoods – fishing, fowling, peat-cutting, stilt-making, reed- and sedge-gathering, and of course water transportation and navigation – will be sacrificed to the beef and bacon that can be raised on the newly drained land. The powt, or eel, calls on his ‘ancient water nurses’, Captain Flood and his minion Two-Penny Jack (a pike), to drive the hated cattle away and to ‘bear down banks and break their ranks and Whirly-giggs asunder’. Instead of powering those whirligigs – the windmills driving the pumps – he asks Aeolus to send water back into the drained areas ‘lest Essex calves want water’.¹⁹ Dugdale regards such complaints as ‘libellous’ and promoted by ‘obstinate persons’, although he is even-handed enough to reproduce a poem whose sentiment he is charged to dispute.²⁰ Traditional enclosure, he argues, is known to increase the productivity of land (he proves this

¹⁷ ‘The draining of the fennes’ in J. P. (1661) *Wit and Drollery*, 152. These poems are claimed to be by Davenant, Donne, and others. This poem is unattributed.

¹⁸ ‘Upon the fall of Wisbech Bridge’ in J. P. (1661) 66–7. This may be a reference to Andrewes Burrell’s sluice at the Horseshoe above Wisbech, built in 1631. See Andrewes Burrell (1642) *Exceptions Against Sir Cornelius Vermudens Discourse for the Draining of the great Fennes* 11.

¹⁹ ‘The Powtes Complaint’, reprinted in Dugdale (1662) 392. The hint of learning detectable in this poem – with its calls upon Greek gods – confutes the standard profile of the anti-drainers constructed by the investors – rude and uncivil men without the sense to recognise their own interests in the drainage projects.

²⁰ Dugdale (1662) 391–2.

statistically by records of 'musters, subsidies, tenths, and fifteens'), so that the recovery of the drowned lands is that much more necessary to bring 'vast proportions' of valuable alluvial soil into tillage. 'In marshes . . . where grounds are severed and trenched [i.e. drained]', he observes, 'it is hard to find a poor man'.²¹ Recent research suggests, however, that far from being depressed and unproductive, the fens were in fact more fertile and prosperous before they were drained than many other parts of the country, so that Dugdale is either being economical with the truth (which does not sort with his reputation for accuracy), or he is genuinely beguiled by the regrettable stereotype of fenland society and culture so eagerly promoted by the drainers themselves.²²

This second possibility is easier to credit when we realise that his antiquarian undertakings, his scrupulous gathering and organising of data, were for Dugdale not mere recording exercises, but amounted rather to a moral obligation yielding an interpretation of England itself, an attempt to identify and promulgate a rising sense of English greatness. The 'Letter to the Reader' which follows the dedication to the king declares in an almost Hobbesian opening that 'the strength of a king is in the multitude of his subjects',²³ and from this it follows that the more successful the subjects, the stronger the king. All great nations, Dugdale notes, have made a habit of improving their wastelands and commons for the greater productivity and good of the commonwealth.²⁴ From this proposition, repeated and instantiated many times over the course of the book, it follows that the drainage undertakers are participating in nothing less than the civilising of England; and that those against such a project are necessarily vulgar, obstinate, and working against king and commonwealth. His closing sally, however, appeals not only to the pocket, but to a kind of moral landscape: fenlands, Robert Burton had argued, are subject to the melancholy associated in humoral diagnosis with damp and the bad air of damp landscapes. Burton convicts King's Lynn and Romney Marsh, among a number of English places, of a nasty, sluttish, and sordid population which 'suffer[s] their air to putrefy, and themselves to be choked up'.²⁵ Samuel Pepys described his own sorry journey into the fens near Wisbech in 1663 in terms of dreary backwardness, where his horse was belly-deep in water and where his wretched cousins subsisted in a 'heathen' place of poor, semi-derelict farms and cottages, insufficient clothing, and miserable inns infested by fleas and bedbugs.²⁶ 'All the Fens is a meer quagmire' was the vicious libel apparently circulated

²¹ Dugdale (1662) [A2^v]. ²² Lindley (1982) 6. ²³ Dugdale [A2^r].

²⁴ Dugdale (1662) 1. ²⁵ Robert Burton (1989) *The Anatomy of Melancholy* 1, 236.

²⁶ Samuel Pepys (1985) 309–10; 17 September 1663.

by the projectors.²⁷ Dugdale similarly asks: 'What expectation of health can there be to the bodies of men, where there is no element good? The Air being for the most part cloudy, gross, and full of rotten harrs; the Water putrid and muddy, yea full of loathsome vermin; the Earth spungy and boggy, and the Fires noysome by the stink of smoaky Hassocks.'²⁸ Such areas are morally as well as physically unhealthy. Undrained districts are generally 'poor desolate places' which afford little comfort,²⁹ and 'harbour . . . a rude, and almost barbarous, sort of lazy and beggarly people'.³⁰

The account of draining from Genesis to the early Middle Ages is another of Dugdale's 'authority' tropes: a breezy set of ten brief chapters, each on a nation or province, it reads like the best sort of chronicle history. Dugdale records anecdotes of Darius the Persian's anxiety about various proposed navigation channels in the isthmus of Egypt (it was thought that the Red Sea was higher than Egypt itself, and that a new trench at Suez would, if cut, flood the country). He retails the exploits of history's only female drainer, Semiramis of Babylon, and those of Hercules in Thessaly. He explains how the Roman armies were set to digging with baskets and spades to drain the Pomptine marshes, and neither was 'this employment thought too mean for the legions, though consisting of Free men', because they were well accustomed to working not only in times of danger, 'but for the common good also in time of security'.³¹ He describes a howling seal who providentially indicated a breach in the sea defences at Hontdam in Flanders in 1169; and a game among Dutch children involving sandcastles which resist the waves, an emblem, he suggests, of that industrious nation's long history of embanking. In a chapter on drainage in the Americas consisting of a single sentence he notes the draining of the Lake of Mexico by the Spaniards in 1634.

The purpose of this prehistory of the subject is to justify English drainage by comparing it to that of the greatest nations of antiquity and to the most advanced modern exemplars – a cultural move very common in the Tudor and Stuart era, and typified by Camden's designation of the archipelago 'Britannia', Inigo Jones' theory of Stonehenge, and Thomas Browne's analysis of a bunch of paltry Saxon burial urns all as Roman. Dugdale's pre-English accounts of draining are geographically precise even if semi-mythical in parts.

Although the Roman origin of East Anglian drainage is something he is keen to stress – to give seventeenth-century draining the glamour of

²⁷ Anon. (1653) 8. ²⁸ Dugdale (1662) [A3^r] ²⁹ Dugdale (1662) [A2^v].

³⁰ Dugdale (1662) 171. ³¹ Dugdale (1662) 7.

Roman precedent and heritage, but also to emphasise the antique authority of such civil undertakings – once across the Channel and on English shores, because his purpose changes, his narrative becomes almost solely legal and documentary. He starts with Romney Marsh, although he has to admit that the name is not, as he would have wished, a corruption of 'Roman' but rather of the Anglo-Saxon 'rumen-*ea*' (which he translates as 'large watery space'). He proposes Romney's customary laws of responsibility for the upkeep of banks, drains, watercourses, dykes, sluices, and dams as the template for all the rest of English marshland, as a body of precedents for land improvement and protection which he insinuates is practically prehistoric, much as his international history of drainage locates the subject in the beginning of the creation. He then leaves Romney to perambulate west along the south bank of the Thames and beyond as far as Somerset, before reversing his path eastward along the north bank. This part of *Imbanking and Drayning* is thus a chorography of drainage, akin to Camden's *Britannia* and Drayton's *Poly-Olbion*, but it lacks the chronicle-like character of the preceding chapters; indeed, even the typography is altered. The ensuing 21 chapters (about 160 double-columned pages) become highly repetitive. Wherever drainage has occurred in England, it is always the same story: each chapter recounts with pedantic rigour the endless arguments among local farmers and landowners about who should bear the cost of drainage. In general, all parties concede that it is in their interests to carry out such works, but no one can agree about who should pay. Sheriffs, royal commissioners, justices and magistrates, sometimes the Privy Council and the king himself, are brought into the dispute on each occasion, always to find that those who own or farm the land will profit most from the initial draining and therefore should contribute to the cost of the project and its subsequent upkeep. Not only is the story the same, but so is the outcome. An entertaining example, in Romney Marsh in the reign of Henry III, concerns one Godfrey Fauconer, who brought suit against the local bailiff Hamon Pitte for taking ten of Godfrey's cows. Hamon replied that Godfrey, a landowner in the Marsh, had not paid his share of the upkeep of the banks and watercourses in the vicinity even though, by the ancient custom of the Marsh, 'all that hold any lands, ought, according to the quantity of their tenements, to make the banks and watercourses against the Sea and other inundations of water.'³² The cows, Hamon argued, were payment in lieu of Godfrey's defaulted contribution. Hamon added that it was also customary for such 'distraints and distresses' to be made on defaulters, with the property returned if the payment was forthcoming.

³² Dugdale (1662) 22–3.

Beneath this extremely dessicated account, it is clear that Godfrey is the neighbour from hell, and that Hamon is the petty bureaucrat born to torment him. Nowadays Hamon would be running the parish council, and Godfrey would probably be had up before the local magistrate for antisocial behaviour. Dugdale tells us that this was not Godfrey's first default, but that Godfrey claimed his own legal precedent for his actions; that the original grant of land by Henry II to his ancestor had made no such stipulation of upkeep, and furthermore that it was only since Hamon had become bailiff that the issue had arisen. Hamon responds that there has been an intervening ruling which upholds his own interpretation, and that in any case banks and sluices in good order protect Godfrey's land from being wholly drowned. Godfrey does not respond to the argument about personal interest (which was presumably irrefutable), but claims that he never gave his consent to the intervening ordinance. The argument goes on in the same quibbling vein for over a year, and it is clear that Dugdale is captivated by this sort of detail; he rehearses exactly every phase of the dispute and precise dates and places of meeting. Because Godfrey won't capitulate, the case goes at last to the king in Council, which supports Hamon. Finally, after further delay, Godfrey backs down on the matter of contributions, but raises yet another dispute, this one about the value of his distrained cattle. It is only after this is settled that peace reigns in the Marsh. This is a civic narrative of a difficult and obstinate individual resisting not only good sense and self-interest, but also joint enterprises, civil cooperation, and their ameliorating social effects. For Dugdale it is an emblem of the evolution through self-restraint of a true commonwealth. It is possible to limit the examples to this one episode because the story is typical of *Imbanking and Drayning's* iteration: Dugdale repeats it throughout many districts and with relentless specificity to authorise his overriding civic message.

Britannia redeemed

Dugdale always oversaw his own works through the press (and even paid for them to be printed in some cases), so his typographical nuances are of more than usual interest. In *Imbanking and Drayning* he flags up hundreds of English placenames in a heavy and bold Gothic font within the standard Roman font; legal bodies, from sheriffs and local juries to the king himself, are italicised. These font conventions may have been inspired by the legal documents which are the source of his information, but here the very look of this material on the page, with its crabbed black-letter proper names

punctuating the cramped roman and distinctive italic fonts, is forbidding. Delivered in such a manner, the book is visually, as well as narratively and rhetorically, exhausting to read, almost as if Dugdale were intending to coerce his readers into submission, both intellectually and optically, to his civic moral (Figure 3). An eighteenth-century edition, produced long after the major works on the Level were complete, is rendered in an altogether airier and more relaxed Roman font and lay-out, as if typographical compulsion were no longer necessary.

The story that is told again and again by Dugdale is of the needful cooperation of local and translocal groups to repel a common enemy, figured in 'the rude and boisterous sea', 'the violence and irresistible force of [which], being agitated by high and boysterous winds...wasted and consumed much'.³³ The word 'boysterous' in this sense (one of Dugdale's favourites) was not a very old word in English at this point: it means not only bulky and cumbrous, but rough and coarse, and from the late sixteenth century is applied to weather and waves. The sense of exuberant noisiness that is the more modern meaning is not yet apparent; instead, the sense of the sea as unruly, disobedient, uncivil, even vulgar in its coarseness is used by Dugdale to intimate that the carefully designed and managed defences against the sea are by contrast civil, orderly, and law-abiding. If drainage is persistently analogised as civil and eirenic, the sea becomes a figure for the uncooperative and disruptive, for all that must be excluded from the Commonwealth, a figure peculiarly powerful in the watershed between the wars and the Interregnum on one hand and the Restoration on the other.

That civic moral is politically important to Dugdale, not least because it seems to suggest the practical harmony of everyday life on English soil as a way forward in generating a far more significant accord among the bruised factions left standing at the eve of the Restoration. Those factions could lay down their arms and their resentments in order to face together all the generalised threats to the nation and to Englishness – from the lawless, ungovernable sea which had a tendency along much of the English coast to destroy or devalue property, to the cunning Dutch who could threaten naval invasion as easily as they could carry out drainage on English soil. In this respect, the date of composition and of publication of this encyclopaedia is significant: it appeared in 1662, ostentatiously dedicated to King Charles II. The *History of Imbanking and Drayning* has for this reason always been assumed to be a work of the early Restoration; this is what Antony à Wood claimed in *Fasti Oxoniensis* in his biography of Dugdale,

³³ Dugdale (1662) 80.

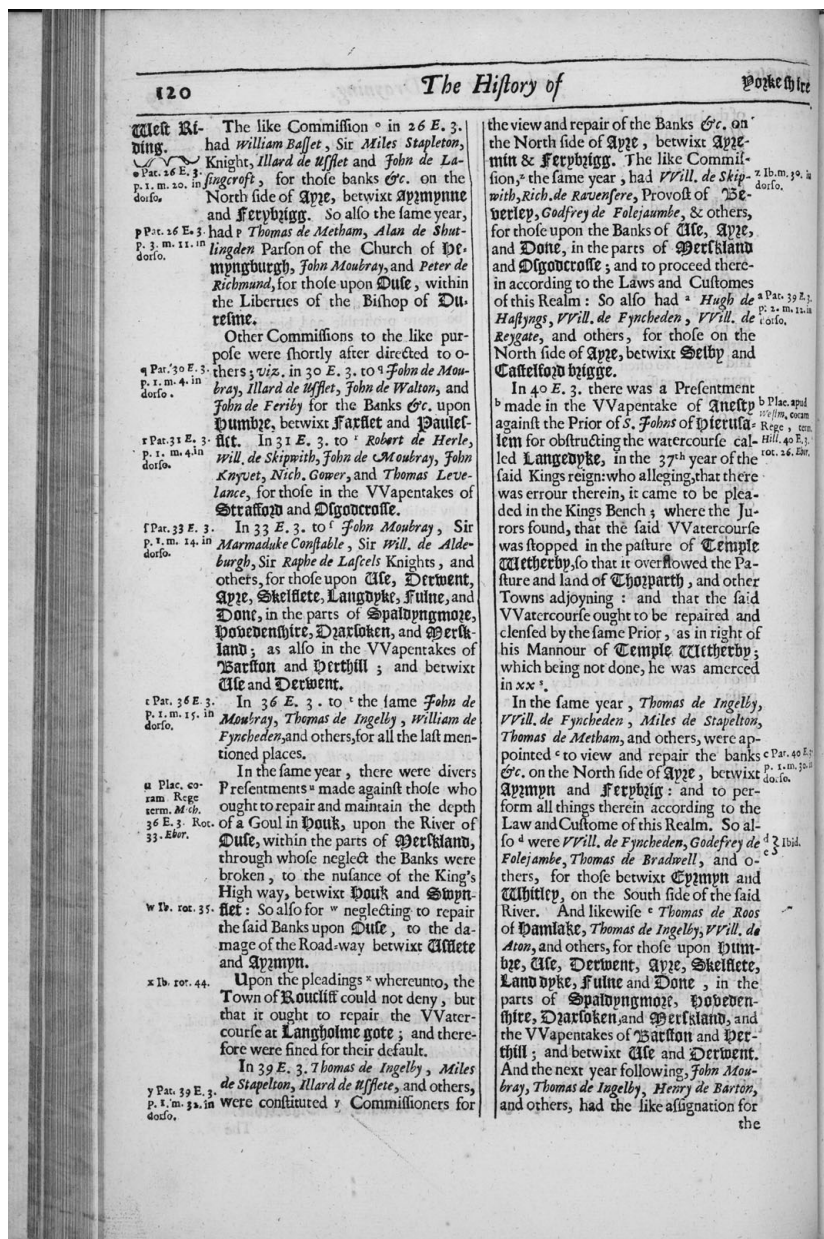


Fig. 3 William Dugdale, *History of Imbanking and Drayning of Divers Fenns and Marshes*, 1662 (London: Alice Warren) p. 120 (Henry E. Huntington Library and Art Gallery).

and he had known Dugdale and solicited information directly from him.³⁴ But in fact the documentary evidence in the form of Dugdale's own letters and claims for expenses shows that he was at work on it mainly in 1657–58, toward the end of, and for, the Protectorate, a fact that he almost certainly wished to obscure once Charles II was restored to the throne.³⁵ Thus, it is a work which is written by a Royalist for the other side, written partly during that side's ascendancy and probably finished once his own party had regained power.³⁶ Its eirenic message – the English should cooperate with one another in communal projects of mutual benefit – is peculiarly salutary in the transitional years of 1658–62.

However, Dugdale is certainly animated not just by political necessity, but also by a tradition of antiquarian, investigative cooperation that had been self-consciously upheld as a model of corporate, mutual endeavour in the first half of the seventeenth century. Chorographers, etymologists, and the historians of monuments, and no less than these, the natural philosophers in Oxford, London, and scattered around the country, habitually (sometimes almost willfully) collaborated in their work in spite of growing factionalism. The letters of Samuel Hartlib, Henry Oldenburg, Thomas Browne, and William Dugdale himself, to name only a very few, show the extent of the exchange networks of learning and discovery which allowed men of every political and religious stripe to put the advancement of learning ahead of personal politics. Dugdale, steeped in a professional ethos of cooperative and communal endeavour, informs his history of draining with this habit, even as he hides the underlying profit motive and ruthless manoeuvres which supported the works.

At thirty-one chapters, this global and English history of drainage makes the bulk of the book, and yet it is really a preamble to its ultimate purpose, the further nineteen chapters addressing the draining of the Great Level. Although much of this material is, like the preceding pan-English section, based in the fatiguing rehearsal of legal wrangles and documents, it is distinctive in its speculative latitude, its moralising narrative tendency, and its intimation of the fens as an exceptional case. He opens his discussion of the Great Level with an account of its origins, of which he is uncertain. Archaeological evidence – mostly gained from the drainage works themselves – tells him that the land was once dry rather than fenny, because trees and

³⁴ Antony à Wood (1691–2), *Fasti Oxoniensis*, 697, in *Athenae Oxoniensis*, 2.

³⁵ See, for example, Dugdale's correspondence with Thomas Browne in 1658–62, in which he consults Browne on the nature of fossils and earths, and on Roman embanking in the fens, in preparation for *The History of Imbanking and Drayning*; Browne (1964) 4, 300–27.

³⁶ Parry (1995) 243–5.

other vegetation associated with quite different landscapes have been dug up beneath the silty bottom. That walnut and other species which will not grow in moist ground have been found full-sized but apparently flattened suggests to him that some catastrophe created the fens of the Great Level. He has seen the white clay of the original landscape almost twenty feet below the current level of silt in diggings at Salter's Lode in Cambridgeshire and the Skybeck Sluice near Boston, and so can confidently assert that 'this country was not originally annoyed with the inundations of the Ocean . . . it was at first a firm, dry land, with no stagnation of the fresh waters'.³⁷ From his examination of the skeleton of a great fish discovered at the western edge of the Level by Sir Robert Cotton, he also concludes that its depth of water was once very much greater, and possibly also saline.³⁸ An earthquake is the only possible explanation for such a sudden inflowing of water, and he finds evidence in Tacitus for such an event in the first century AD. A passage from Ovid authorises this view:

Where once was solid land seas have I seen,
And solid land where once deep Seas have been;
Shells far from the Sea, like Quarries in the ground,
And Anchors have in Mountain tops been found.³⁹

Dugdale has, of course, no sense of the true chronology of such events – the petrified fish found by Cotton would have been orders of magnitude older than any event reported by Tacitus. Nevertheless, the sense of huge events and vast antiquity clearly distracts Dugdale from his more typical enquiries, and this seems to generate a sense of awe which influences the nature of the subsequent narrative.

Whatever the origins of the waters, Dugdale reports that the outfalls of rivers that would have emptied freely at the coast have since been obstructed and even wholly blocked by tidally borne silt in the Wash, so that the Level is now essentially a great shallow lake. The towns and villages of the Level are necessarily situated on 'eas' or islands, and this drowned landscape has, as well as a legal and customary history, a curious symbolic heft. Like most of his antiquarian colleagues, Dugdale relied greatly on etymology, both of place-names and of technical words, to establish historical fact, and in examining the Peterborough register he notes that part of the Level was in antiquity inhabited by a people calling themselves 'Gyrvi', because, as he

³⁷ Dugdale (1662) 172. ³⁸ See my discussion of this in Preston (2005) 123–31.

³⁹ Ovid, *Metamorphoses* 15 (trans. George Sandys, quoted by Dugdale (1662) 173). Robert Hooke was one of a number of geological investigators who also held this view (Hooke (1705) *A Discourse of Earthquakes* in *The Posthumous Works of Robert Hooke*, 290–1, 299).

explains, 'gyr in English [ie, Old English] is the same as *profunda palus* [or 'deep fen'] in the Latine'.⁴⁰ This he regards as another proof that the waters of the Level were once very deep indeed, 'and so rendreth it uninhabitable, excepting in some high places, which God of purpose raised . . . to be habitations for his servants, who chose to dwell there: For in such places, within the Fen do [the monks] of Ramsey, Thorney, Crowland and many other beside, to which there is no accesse but by navigable vessels'.⁴¹

Dugdale had previously written extensively about monastic foundations, but here he uses the island-dwelling fenland monks as points in his mapping of a spiritual, Christian history onto the landscape, a history of withdrawal and endurance in a place of extreme wilderness. Places like Crowland are places of horror where saints and other holy folk have settled down to resist temptation and to mortify the spirit. St Audrey, or Etheldreda, for example, the founder of the Benedictine religious colony at Ely in 673, escaped into the fen to avoid an even greater evil, the consummation of her marriage to King Egfrid of Northumberland. Secluded within the waters of the fens and abundantly supplied with powts, or eels, supposedly the origin of the placename, Ely was convenient to a fleeing saint and to an order which abstained from meat. Etheldreda's presence in the drowned lands of the Great Level converts it into a place of miracles: subsequent Danish invaders were struck dead when they tried to tamper with her tomb. St Etheldreda, an early civilising and ameliorating force in the fen wilderness, is by Dugdale's implication a type of the seventeenth-century drainers. So too is St Guthlac (c.673–714), whose travails are even more notable. He went into 'a hideous fen of huge bignesse . . . , dreadfulness and solitude' where he was assaulted by 'strange and uncouth monsters . . .'. 'No country man . . . could endure to dwell in it, by reason that such apparitions of Devils were so frequently seen there.' Guthlac chose to live in the very spot where the devils congregate, and underwent a St Antony-like temptation from the 'black troops of unclean spirits' who came to his cell to torment him. After resisting their bellowing and general unpleasantness, Guthlac was dragged out of his cell, thrown headfirst into the dirty waters, then carried through 'rough and troublesome parts' of the fen which were full of brambles and briars. Having survived this ordeal, Guthlac eventually founded a colony of hermits at Croyland or Crowland. The abbey at Crowland was a magnificent ruin by Dugdale's time.

Dugdale observes that holy people have been withdrawing to wilderness places since antiquity 'out of great piety, [and] to forsake the vanities of

⁴⁰ Dugdale (1662) 179.

⁴¹ Dugdale (1662) 179.

this transitory world, [and] bet[ake] themselves wholly to the service of God'.⁴² This remark not only claims the landscape of biblical and primitive Christian temptation in the wilderness as local to Britain, giving England an almost Spenserian fabulous and heroic spiritual history, but also implies a civilly heroic identity for those who have since tamed this darksome and formerly terrifying place.

With such stories Dugdale moralises the fens as an arena of fundamental contention between good and evil, with the victors imposing their pious will on the landscape, rescuing it from hideous horror and putting in place of the howling devils and marauding Danes religious houses practising a selfless communitarian way of life. Moreover, English saints with English names like Guthlac and Etheldreda, or even 'Audrey', in its Norman contraction, allow Dugdale to assert the etymological as well as the political Englishness of fen improvement. However, this highly symbolic and nationalist fen history is directly challenged in the same vein by the 'Fen Tigers' (as the local inhabitants were called who vigorously resisted Dutch drainage) who claimed that

Our smaller rivers are now dry land,
The eles are turn'd to serpents there.⁴³

For them, the Level's formerly Edenic landscape of plentiful fishing is being converted by draining into a sinful, denatured world, a moralising of the fen which is the antithesis of Dugdale's civil apologetic.

By 1662, there are different terrors to confront: Guthlac's shrieking spirits are no longer being invoked, having been replaced in the polemical imagination by the boisterous and menacing sea. Dugdale cunningly yokes the hair-raising supernatural adventures of early Christianity in fenland England with, a thousand years later, the battle against this equally dangerous, wholly natural, enemy. This, perhaps more than his more obvious stories of cooperative embanking in the high and late Middle Ages, is an artful move. As his two maps of the Level, drowned and drained, show clearly, the project of draining created dry land where before had been swamp and fen. In a memorial elegy on Sir Jonas Moore, the chief surveyor of the Great Level under Vermuyden in the 1650s, an anonymous poet praises his subject as one who '[g]ave the Sea Laws, and Massy Earth Controul'd' with 'God-like Art'.⁴⁴ The overt analogy between draining and God's division of

⁴² Dugdale (1662) 180 ⁴³ 'The draining of the fennes', in J. P. (1661) 152.

⁴⁴ Anon. (1679) *To the Memory of my most Honoured Friend, Sir Jonas Moore, Knight, Late Surveyor General of His Majesties Ordnance and Armories*, 1. This poem has been tentatively attributed to Nicholas Stephenson by Frances Willmoth.

the waters in Genesis is one Dugdale had already used at the beginning of *Imbanking and Drayning*, so that in the Great Level he can show that same act recapitulated. Dugdale's vision is, in other words, nothing if not epochal.

The antiquarian projects of this era often had an explicit patriotic slant: Evelyn's *Pomona*, a history of apples and cider, is almost completely English, as is his *Sylva, or Discourse of Forest Trees*, and both, like Dugdale's *Imbanking and Drayning*, are intended to promote certain kinds of commercial and agricultural activity of wide benefit to the nation; so too, Michael Drayton's *Poly-Olbion*, a poeticised version of Camden's *Britannia*, celebrates the *réclame* of the druids and their friends, Joseph of Arimathea, Arthur, and other phantasms of the so-called British History. *Imbanking and Drayning*, with its Plinian dedication to the ruler drawing royal authority to the drainage works and to Dugdale's book, is also a history, and one which tells of nothing less than England's national development over a millennium, from the literal bringing-into-being of the land itself to the latent sense of an English polity, in around 1660, gradually coalescing once more into communal orderliness after the long internecine incivility.

23 | Irony and encyclopaedic writing before (and after) the Enlightenment

WILLIAM N. WEST

The trope of irony and the great volume of encyclopaedic writing before the Enlightenment probably do not immediately seem to have much to say to each other. Irony, of course, is a notoriously complicated way of using language, no less hard to define than encyclopaedism and maybe considerably harder to detect. My working definition here focuses on a kind of irony that I want to argue is apparent in many premodern encyclopaedic texts: by ‘irony’ in the context of encyclopaedism I mean the self-subverting stance that many early encyclopaedic works express towards the possibility of their projects, calling their efforts into question without abandoning their goals of coherence, comprehensiveness, usefulness, and universality. It is an attitude combining commitment and scepticism, resignation and enthusiasm. An example of such a mixed stance appears in what has become the defining encyclopaedic project of the Enlightenment, the great *Encyclopédie* of Diderot and D’Alembert (1751–77). One need only compare the optimism with which D’Alembert introduced its double project in the ‘Discours Préliminaire’ to its first volume (1751) – ‘to set forth as well as possible the order and connection of the parts of human knowledge . . . [and] to contain the general principles that form the basis of each science and each art, liberal or mechanical, and the most essential facts that make up the body of each’ – with the much more complex ‘Foreword’ to its eighth volume a few years later, which acknowledged that ‘we may find ourselves in agreement with those who do not consider this dictionary a great work well done, so long as they grant us the merit of having collected the material’.¹ This gesture of giving and taking colours the description of the *Encyclopédie*, a few sentences later, as ‘the finest compendium that has ever existed’, a phrase which, by itself, seems much closer to the tone of the *Preliminary Discourse*.

Literary representations of encyclopaedic projects after the Enlightenment often present the possibility of acquiring and organising the totality of knowledge with even more explicit irony: the baffling meanderings of the narration of *Tristram Shandy* (1759) as the narrator attempts to get to the beginning of things; in *Middlemarch* (1871), Casaubon’s ambition to

¹ D’Alembert (1995) 4; Diderot (*et al.*) (1965) ‘Foreword to Volume VIII’, 116.

uncover the Key to All Mythologies, perfectly matched to the glaring blind spot of his ignorance of German, which makes it impossible for him to see that his project has already been refuted in scholarship that he cannot read; the attempts of the title characters of Flaubert's *Bouvard and Pécuchet* (1881) to realise the good life through the application of the latest and most authoritative philosophies and technologies, which painfully demonstrate that life is short, and art is too long for it; the impossible, impenetrable, inexhaustible humour of *Finnegans Wake* (1939); the paranoiac relays of Pynchon's *Crying of Lot 49* (1966), in which the landscape of Oedipa Maas' night journey seems to bristle with infinite, almost-available significance and connections, or the lunatic bids at comprehension and surveillance of *Gravity's Rainbow* (1973); Borges' images of encyclopaedism made strange in the Aleph, the Library of Babel, the Chinese encyclopaedia, the map coterminous with its territory, the prodigious memory of Funes, or the absorbing fictions of Tlön, Uqbar, and Orbis Tertius.² Late twentieth-century and early twenty-first century works by authors like David Foster Wallace and Don DeLillo have added another strain of encyclopaedic ironies to this various group.

I begin my discussion of encyclopaedias before the Enlightenment with these post-Enlightenment, and even postmodern, texts, not to suggest that the encyclopaedic genre has a constant essence, or that to look at one encyclopaedia is to see all of them – although I think the claim that there is only one encyclopaedia, because the goal of all encyclopaedic writing is to mirror everything else, has a privileged place in the tradition of encyclopaedic writing.³ I treat these later works as seeking in part to describe or represent a genre of encyclopaedic writing and to place themselves within it or at least alongside it. The readings and rewritings of earlier encyclopaedic projects presented in such works suggest their compilers' sense of which texts belong in that tradition, what that tradition has promised, and how it has unfolded. To consider earlier encyclopaedic writings in conjunction with later ones allows us to glimpse precisely what encyclopaedic writings themselves so often deny, their own history as textual forms rather than as neutral containers of information. The advantage of examining modern and postmodern fictional encyclopaedic writings is that they have often framed their predecessors as texts with particular features and not simply as collections of more

² On the embedded history of Borges' map and its afterlife in Baudrillard's writings, see Selcer (2007) 45–6, n. 9.

³ On the encyclopaedia's claim to uniqueness as a 'sacred text' for, or blueprint of, a given cultural system, see Frye (1957) 308–26; Moretti (1996) 4, although he calls such texts 'modern epics'; and West (2002) 14–15.

or less neutrally organised, readily available data. Scholars repeatedly turn to premodern encyclopaedias to discover what people knew or thought in a particular historical and cultural moment, without necessarily considering the form in which such information is assembled.⁴ Fictional representations of encyclopaedism help make visible some of the concerns about knowledge and knowability that have made the encyclopaedic text an important form in recent literature, in addition to our work as historians of placing them in their original contexts.⁵

To bundle together such a varied array of texts, and then to go further and to suggest a connection with another contested group of texts labelled as pre-Enlightenment encyclopaedias, begs the question of just how much a category like ‘encyclopaedias’ can meaningfully accommodate. To speak strictly, the encyclopaedia, or at least the term, is an invention of the late fifteenth century, although its first users believed they were resurrecting an ancient concept and name together.⁶ Encyclopaedias in the usual modern sense – collections of articles about a variety of topics organised alphabetically – first appear as products of the epistemological revolutions of the eighteenth century.⁷ But many works that do not explicitly call themselves encyclopaedias can be usefully thought of through, or in relation to, this narrower western Enlightenment definition, as so many of the chapters in this volume demonstrate. At the same time, I am reluctant to extend the definition of encyclopaedism so broadly as to include any copious or comprehensive kinds of writing whatsoever.

Elsewhere I have suggested that one can discern a loose but distinct genre of encyclopaedic writing by attending to a genealogy of texts that explicitly recall features of prior encyclopaedic writings and so construct an encyclopaedic tradition with which they associate themselves.⁸ One of those features, interestingly, is their denial of precedents and their insistence that

⁴ I develop this point below; see also Blair (2010) 268 on reference works generally ‘mined for useful bits’; Braund and Wilkins (2000) on Athenaeus; Gunderson (2009) on Aulus Gellius – or the ordinary use of reference materials like the *Encyclopaedia Britannica* and Wikipedia.

⁵ On the encyclopaedic text as a particularly modern or postmodern concern, see Swigger (1975); Mendelson (1976); Calvino (1988), esp. ch. 5, ‘Multiplicity’, 101–24; Moretti (1996); Rasula (1999); James Wood, ‘Tell Me How Does It Feel?’ *The Guardian* (October 6, 2001); Jonathan Franzen, ‘Mr. Difficult’, *The New Yorker* 78: 29 (September 30, 2002); Burn (2007), esp. 47–54.

⁶ The word seems to have first been used by scholars associated with Angelo Poliziano and misread from corrupt manuscripts of Pliny’s *Natural History* and Quintilian’s *Institutio oratoria*. The earliest occurrence I have found is written into a 1471 edition of Quintilian at the Newberry Library, Chicago, which like many early editions leaves a blank space for this and all Greek words. See Henningsen (1966) 276–84, who cites a 1472 edition of Pliny as the earliest printed version; West (2002) 15–18; and further discussion in the introduction to this volume, and in Ann Blair’s chapter (18).

⁷ Yeo (2007) 47. ⁸ West (2002) 14–42.

they use the world itself as their final, decisive point of reference. In this paper I will focus on another feature to delimit this bulky and amorphous category: by encyclopaedic writing, I mean those textual projects that totalise, that aim to or claim to compass, and therefore to order and make whole, a universe of knowledge. The premise that what can be known is a totality, and the intention to order and present that totality are, I think, equally important in the tradition of encyclopaedic writing. Under this working definition, an epitome, a set of rules for combining signs, or a vast network of texts can each be equally encyclopaedic, because potentially exhaustive. In contrast, a list, even a comprehensive one, could not, because something could always be added to it serially. The encyclopaedia offers a place for everything: even if it cannot immediately place everything, it imagines that it can. It is a good infinity that is inexhaustible but structured by a delimiting order, like a logical or an alphabetical one, rather than the bad infinity that simply presents one thing after another and makes room for whatever surfaces by appending it anywhere.⁹ The irony of encyclopaedic writing falls, then, somewhere between its initial projection of order or orderability and the ultimate realisation of its execution.

Of course, representations of self-subverting encyclopaedias – what I am calling encyclopaedic irony – are very common in early modern writing: one need only think of Rabelais, who shows Pantagruel deploying the ‘true well and abyss of the encyclopaedia’ in a debate carried out in sign language (1532), or Erasmus’ *Ciceronianus* (1524), in which the eponymous anti-hero devises a set of universal dictionaries enabling anything to be expressed exclusively in words and phrases used by Cicero, and the ludicrous difficulties that using them demands.¹⁰ By irony, I want to clarify, I do not simply mean parody or satire. Certainly there are many works from the early modern period (defining it broadly as c. 1450–1700) that parody encyclopaedic learning in various ways: in addition to the two I have mentioned, Tomaso Garzoni’s incomparably weird *Theatro de vari, e diversi cervelli mondani* (The Theatre of Various and Diverse Brains of the World, 1584?) and Robert Burton’s Latin play *Philosophaster*, about the founding

⁹ The concepts of good and bad infinity appear in Hegel (1986) vol. 1, 198–201. Scholarship on premodern encyclopaedic writings has sometimes taken for granted what it would mean to be encyclopaedic, so my working definition here draws freely on attempts to describe more recent works. I do not claim a spurious unanimity of definition, but encyclopaedism as a particular genre has been helpfully described by Frye (1957) 308–26; Mendelson (1976); Conte (1991); Clark (1992); Moretti (1996) 1–7; Rasula (1999); Yeo (2001) and (2007). I am grateful to Daniel Andersson’s cogent questions at my presentation for helping me to clarify what I want to talk about.

¹⁰ On Rabelais, see West (2002) 14–15.

of an absurd university that tries to inculcate all knowledge through a series of shortcuts. The genre of the mock collection or library catalogue is also prominent, for instance the examples of Rabelais' Library of St. Victor, a farrago of trivial and bizarre writings with titles as ridiculous as the contents they offer, such as *Antiperimetanaparbeugedamphicribationes merdiantium* (the first word is nonsense composed of Greek prepositions and particles; the second puns on *mendicantium*, 'of the mendicant friars,' and means 'of the shitters'), or *Ars honeste petandi in societate* (The Art of Farting Politely in Company); and similar works by John Donne, *The Courtier's Library: or, Catalogus librorum aulicorum incomparabilium et non vendibilium* (Catalogue of Incomparable and Unsellable Courtly Books; c. 1604), and Sir Thomas Browne, *Musaeum clausum* (c. 1660), which likewise lists a collection of comical rarities or impossibilia. An easy, and apt, objection to texts like these is that such works are not real encyclopaedias, but recondite parodies or representations of encyclopaedias; they invoke the perfectly ordered, absolute knowledge of the encyclopaedia as a theme, but they do not actually seek to gather and organise all knowledge. But that argument is harder to sustain for texts like Cornelius Agrippa's methodical 'distinguing' (to borrow a word from John of Salisbury's *Metalogicon*, c. 1159) of all branches of learning in *De vanitate et incertitudine scientiarum atque artium* (1527); or Burton's sprawling *Anatomy of Melancholy* (1621 and after), which seems to discover in everything possible sources and possible cures for melancholy, a condition of morbid self-scrutiny which Burton's book seems perfectly to symptomatise.¹¹ It is in such ambivalent texts that I would locate a real encyclopaedic irony, where the seriousness of the intention to totalise cannot be fully disentangled from signs of its impossibility.

Ambivalent encyclopaedic texts are so common that they are, if not a norm, at least hardly outliers, from Angelo Poliziano's *Panepistemon* (1491), which begins as a commentary, expands to a system of knowledge, and finally devolves into lists of abstruse terms of art, to commentators' responses to the very serious works of Athanasius Kircher in the mid-seventeenth century (one reader observed in the margin of one of Kircher's volumes that 'he wrote much, but not accurately').¹² My contention, then, is that the temptation to see only a straightforward commitment to encyclopaedism before an increasing scepticism of the seventeenth century – pitting an

¹¹ For 'distinguing', *dedocere*, see John of Salisbury (1991) *Ioannis Sarisberiensis Metalogicon*, section 2.10.

¹² Quoted in Stolzenberg (2001) 1–2. On Poliziano's *Epistemon* as a parody of learning, see Blanchard (1995) 59–60, and 52–66 on other humanist parodies of encyclopaedic knowledge. Poliziano's circle probably originated the term *encyclopaedia*.

early, supposedly naïve belief in encyclopaedic totality against a later, more measured sense of doubt – should be resisted, and that irony is a constitutive element of the genre of encyclopaedias before the Enlightenment. These early encyclopaedic texts are at least partly tongue-in-cheek about their projects, but are also usable and learned works of reference.¹³ To read irony in them does not mean that premodern encyclopaedias were not taken seriously as sources of knowledge – that is the kind of easy understanding of irony I want to avoid. They were. But until the Enlightenment, which introduced Bayle's exhaustive mustering of sources and arguments in his *Dictionnaire historique et critique* (1697), the indefatigability of Chambers' *Cyclopaedia* (1728), and the earnest radicalism with which Diderot and D'Alembert could look ahead to their *Encyclopédie* 'which will someday contain all knowledge', encyclopaedic writings also represented their own attempts as deeply, perhaps irrecoverably, compromised.¹⁴

Even overtly parodic texts come close to actual encyclopaedic works of the period, suggesting that their parody may be less unequivocally absurd than it seems to us (one could also, of course, argue that it is only worth parodying what somebody else – somebody stupid – takes seriously). While in *Ciceronianus* Erasmus clearly meant to make fun of the Ciceronian Nosoponus, who had a collection of lexica that enabled him to write Latin using only words and phrases from Cicero, the rhetorician Giulio Camillo seems actually to have tried to construct such a device in the early sixteenth century, and the English educator Joseph Webbe published several books that allowed one to reproduce lines of Ovidian elegiacs mechanically, by picking words and phrases out of a digest of Ovid's works arranged by their metrical shapes.¹⁵ Burton's philosophaster comically prefigures the frantic, scattered scholarship of Burton's later and longer *Anatomy of Melancholy*; and Thomas Browne's imaginary museum, containing *Artemidori Oneirocritici Geographia* (something like *Hypnerotomachia Poliphili*, perhaps?) and 'The Works of Confutius the famous Philosopher of China, translated into Spanish', is not much stranger than the collection of the Tradescants, catalogued in the *Musaeum Tradescantianum* (1656), which anagrammatises its collector's name as 'Cannot Hide Arts' and includes 'An Orange gathered from a Tree that grew over Zebulon's tomb', or the collection of

¹³ Another objection could be that irony in encyclopaedic writings from before the Enlightenment exists, but is exceptional; Relihan (2007) has recently made a similar argument about Boethius' *De consolazione philosophiae* (c. 524).

¹⁴ On Chambers and the English tradition, see Yeo (2001). The quotation is from D'Alembert (1995) 112.

¹⁵ See West (2003).

John Bargrave, still in existence at Canterbury Cathedral, which contains the mummified ‘finger of a Frenchman’.¹⁶ This overlap of the overtly ridiculous and the genuinely recondite gets at the irony I want to describe in these encyclopaedic writings. They show their ambivalence in a simultaneous intensity of interest in total knowledge of the circle of disciplines and a profound sense of its impossibility, even silliness, as a project.

One example: in *Pseudodoxia epidemica*, Thomas Browne several times cites in passing one of his age’s most celebrated encyclopaedists, ‘the learned *Kircherus*, no man were more likely to be a better *Oedipus*’.¹⁷ This refers to the famous Jesuit scholar Athanasius Kircher’s recent and long-awaited *Oedipus Aegypticus* – which was greeted with derision, among other responses, when it actually appeared.¹⁸ Such a mixed reception was not all that unusual for Kircher’s works, which were frequently deliriously anticipated and then held up to ridicule within the Republic of Letters. To which Oedipus does Browne refer – the triumphant riddler (certainly Kircher’s own sense of his achievement) or the blinded man who stumbled over what he could not see, despite his knowledge? To both, I would argue. It is easy for us to read these texts as if their irony were the result of our more knowing eyes. But the irony of Kircher’s status and achievements is not simply the product of our remoteness from them; it was also remarked on by his contemporaries. Their ambivalence is so frequent as to approach the status of a norm for encyclopaedic writing. We need to read these texts seriously enough to be ambivalent about them, with them, and not so superior to them as to believe that they must have been wholly sincere.

The irony of the encyclopaedia, in other words, resides in all the ways it fails to achieve its bid to represent *omnia omnes omnino*, ‘all things in all ways for all people’, as John Amos Comenius put it, precisely because of its commitment to universality – by including everything, it risks never ending, making itself illegible, unravelling into chaos, or all three.¹⁹ The closeness of some of the realities of early modern encyclopaedism to what looks like absurdity has sometimes made their pervasively ironic stance with regard to their efforts hard to recognise from their contents alone, especially when these are excerpted into bits of data. In contrast to the long-recognised

¹⁶ Tradescant (1656) 43; Bann (1994) 6, 13–14, 77, 103. For Bann, the Frenchman’s finger serves as a synecdoche of the copiousness, compression, curiousness, and memoriality of Bargrave’s collection; he makes it a kind of shorthand for the whole.

¹⁷ Browne (1981) vol. 1, 201.

¹⁸ On the range of reactions to Kircher’s work on hieroglyphs, see Findlen (2004), esp. 13–19, 31–4.

¹⁹ These are the first three chapters of Comenius’ reconstructed *Pampaedia*, a section of his final encyclopaedic project, *De Rerum Humanarum Emendatione Consultatio Catholica* (1966).

uses of allegory and emblem in encyclopaedic writings – for instance, the memorable image of learning in Gregor Reisch's *Margarita philosophica* as a maiden attended by various exemplary and symbolic figures (Figure 2), figures that tend to telegraph their doubleness of meaning through their strangeness and out-of-place quality – encyclopaedic irony is less generous in displaying itself.²⁰ It appears, I want to argue, from a formal property that narrative (or reading) creates as the elements of a text are linked together into continuously changing configurations. As new data are added in the course of the text, or even in the more variable course of a reader through it, the contexts in which previous bits of information are situated are continuously recalculated. The trope of irony appears when these new articulations of the information – how it must be arranged to make sense – repeatedly reveal the shortcomings of previous articulations.²¹ This makes the irony of the encyclopaedia very hard to detect in excerpts, since they suppress the framing devices that enable the irony.

If one thinks of the tropes that characterise encyclopaedic writing, one probably considers *accumulatio*, amplification, dilation; periphrasis; digression, in particular *parecbasis* (an apparent digression that turns out to be connected to the topic in an unexpected way) – all the techniques for extending language; of course *diaeresis* (the dividing of a whole into its parts), *distributio* (the allocation of particular qualities or aspects), *horismus* (defining something by talking around it), and most of all, as here, *systrophe* (giving a long listing of things). But surely another of the governing tropes of encyclopaedic writing is *asyndeton* – the omission or suppression of syntactical or logical connections between units or ideas that set them in relation to one another; for instance, in this example from Burton's *Anatomy of Melancholy*:

Man, the most excellent, and noble creature of the World, *the principall and mighty work of God, wonder of Nature*, as *Zoroastes* calls him; *audacis naturae miraculum, the marvaile of marvailles*, as *Plato*; *the Abridgment and Epitome of the World*, as *Pliny*; *Microcosmus*, a little world, a model of the World, Sovereigne Lord of the earth, Viceroy of the World, sole Commander and Governour of all the creatures in it.²²

And so on for another page. Burton's breathless introduction to his subject is typical of encyclopaedic writing in the way it accumulates material without coordinating it. Even when organisational categories have been clearly established, within those categories every proposed hierarchy tends

²⁰ On emblem and allegory as important aspects of the medieval encyclopaedia, see Saxl (1957).

²¹ Rorty (1989) describes irony as the feeling that whatever one knows is contingent and could at some unforeseeable future moment demand revision.

²² Burton (1989) vol. 1, 121.

to unravel into bare listings like Burton's. Are all these descriptions apt? Can man be both 'Sovereign' and 'Viceroy', let alone 'a little world'? Nor are even the categories sufficient, as many premodern encyclopaedias show by including catch-all sections to accommodate data that are discovered not to fit elsewhere; Joachim Ringelberg's encyclopaedic *Lucubrationes, vel . . . kuklopaideia* concluded in a varied section aptly entitled *Chaos*.²³

Because of the amount of data encyclopaedic writings assemble, *asyn-deton*, lack of semantic and syntactic coordination, is one of the most necessary and difficult challenges for encyclopaedic writings to overcome, and the feature that most generally marks their production. Encyclopaedic writings insist on an order or organising that they follow or make visible – one of the most pervasive targets for irony is the absence or unrepresentability of such an order – but while everything is intended to add up to a whole, in practice the interplay between elements is often minimal. An encyclopaedic text should follow an order, or perhaps organise an order, but almost invariably it doesn't. The coordination of the material always promises to manifest itself elsewhere than where the user of the encyclopaedia is at the moment; in a modern analogue, it is the same as when we are reading a wretchedly inadequate Wikipedia entry but still cling to a sense that the Internet is an incomparable source of information. The completion of order and the encyclopaedia's closure are deferred, so that its elements claim their significance as parts of a whole that is nowhere fully visible – or when it is, it is because the details of elements of which it is supposed to be composed have been overlooked or suppressed. They may be set aside until enough matter has been gathered (Francis Bacon's proposed method, and one of Diderot and D'Alembert's as well, and probably the source of any confidence we may have in Wikipedia), or given in advance but no longer visible as the text is being traversed (Burton's method is to print careful Ramist diagrams of the *Anatomy's* contents in the front matter – a tactic also used by Diderot and D'Alembert). But from within the field of knowledge itself, order tends to disappear except as an article of hope or faith.

In general this atomisation of information has been touted as one of the primary advantages of encyclopaedic writing. No longer bound to the exigencies of narrative, or at least arranged so as to cut across them, encyclopaedic writing can claim to be composed of discrete facts, which can be taken individually or combined into a comprehensive *summa* greater than its parts. D'Alembert's *Preliminary Discourse* is explicit about how an

²³ Van Ringelberg (1541).

encyclopaedia transcends the linearity of its composition: ‘Dictionaries, by their very form, are suitable only to be consulted, and they do not lend themselves to continuous reading’ (107). Pliny boasts that his *Natural History*, one of the encyclopaedic texts that loomed largest in the early modern imagination, contains none of the elements in which pleasure is usually thought to consist: ‘it does not allow of digressions, nor of speeches, or dialogues, nor marvelous accidents or unusual occurrences – matters enjoyable (*iucunda*) to relate or pleasant (*blanda*) to read’ (preface 12–13). Instead it offers, as Pliny counts them, thirty-six volumes (not including a preface and a narrative index of sources, the earliest in western literature) containing twenty thousand facts drawn from two thousand works by over a hundred selected authorities.²⁴ The investigations of Ulpian, the leading speaker in Athenaeus’ *Deipnosophists*, typically begin by breaking single words out of their contexts and trying to locate parallel passages in other writings of all kinds, rather than making sense of ‘continuous discourses’ (λόγους διεξοδικούς (3, 97c)), to the great annoyance of his rival speaker, Cynulcus.²⁵ In *Speculum maius* (c. 1230) Vincent of Beauvais urges: ‘Let [the reader] hear again that I do not proceed everywhere in the manner of an author (*autoris*), but of an excerptor (*excerptoris*)’.²⁶ Like Pliny’s, Vincent’s contribution to his encyclopaedia is ‘only in its arrangement of the parts’.²⁷ It is only at the level of the whole, this claim goes, that the coordinating order of the work, as of the world, is visible. The circle of the encyclopaedia before the Enlightenment, and often after, is most frequently claimed to be a surface that is covered completely by its parts rather than a web of connections linking those parts together – which remains obscure.

But critics and historians may have too often taken encyclopaedic texts at their word that they are nothing but discrete facts. Encyclopaedic writings

²⁴ For Pliny’s limited ability, see *Natural History*, preface, 12 (trans. Rackham (1938–62) vol. 1): *nam nec ingenii sunt capaces [libri?], quod alioqui in nobis perquam mediocre erat*. On the contents of the *Natural History*, preface 11: *viginti milia rerum dignarum cura . . . lectione voluminum circiter duorum milium . . . ex exquisitis auctoribus centum inclusimus triginta sex voluminibus*. Pliny’s ability to number his facts and sources and his use of ‘enclose’ (*inclusimus*) to describe their presence in the work suggest how early knowledge began to be conceived as spatial and quantifiable.

²⁵ Trans. Olson (2006–11).

²⁶ *Apologia Actoris* 7, in Van den Brincken (1978) 474: *audiat iterum me non per modum auctoris sed excerptoris ubique pro cedere [sic]. nec circum difficultates quarum libet artium enuciandas propositum meum instituisse*. Van den Brincken gives *doctoris vel tractatoris* in her text, but cites one family of texts as having *auctoris*.

²⁷ *Apologia Actoris* 4; in Van den Brincken (1978) 469–70: *Antiquum certe auctoritate et materia, Novum vero partium compilatione. . . Ipsorum igitur est auctoritate, meus autem sola partium ordinatione*. Van den Brincken offers an analysis of Vincent’s borrowed authority, 411–24; see also Paulmier-Foucart (1991) 201–5 for a reading of this passage.

often claim to be about their information (a modern word that eludes the distinction Vincent makes between an author who makes knowledge and the excerptor who only collects what he finds), and too often we have believed their fascination with their comprehensiveness and their logical shape rather than attending to their execution of either. With encyclopaedias, the elegance of the concept is inevitably betrayed by its execution – by its clumsiness or diffractiveness, or simply by the impossibility of bringing it to a conclusion that is in line with its promise. In his article on ‘Encyclopédie’ in the *Encyclopédie*, Diderot suggests hopefully that although it is impossible to plan in advance a system for ordering all of human knowledge, with copious cross-referencing some order will probably become clear over repeated readings – but that final judgement must wait for a final text, so that even an entry done badly is better than something omitted.²⁸ The awareness within early encyclopaedic texts of the inherent difficulty of leaping from list to circle gives rise to the sense of irony I detect in them.

One result of the widespread acceptance of this notion is that encyclopaedias are neither exactly *read*, nor do we exactly understand them to have been *written*. Instead they are subject to an approach which I will call *mining*, by which I mean the often meticulous and scholarly parsing of such texts ‘as a quarry, from which fragments of earlier texts can be hacked out and put to use, perhaps rearranged’, as a pair of recent writers on Athenaeus have described how *Deipnosophists* is used.²⁹ Such an approach is fairly typical, I think, of the scholar’s long habit of using encyclopaedic texts as deracinated sources, as indices to the beliefs and habits of a historical moment, which is to say as reference works rather than works in their own right. It is much easier to take Stephen Batman’s *Batman uppon Bartholome, his Booke De Proprietatibus Rerum* (1582) as ‘Shakespeare’s Encyclopaedia’ and consult it for information about what Shakespeare thought than it is to trace the multiply layered sources in its polyphony of blending and conflicting voices, from Bartholomaeus Anglicus’ original twelfth-century work, through its translation into English by John of Trevisa (1397/8), and its Henrician reprintings, and reframings, by Wynkyn de Worde and Thomas Berthelet, before Batman’s additions set it into a specifically late Elizabethan nationalist and Protestant context.³⁰ The tendency to mine encyclopaedic texts

²⁸ ‘Encyclopédie’, *The Encyclopedia of Diderot and D’Alembert Collaborative Translation Project*, www.quod.lib.umich.edu:80/d/did/ (last accessed 3/8/12); see also Selcer (2007).

²⁹ Braund and Wilkins (2000) 1; see also Wilkins (2000) 23–37. Blair (2010) 268 similarly chooses the term ‘mining’, apparently independently.

³⁰ Bartholomaeus Anglicus, *Batman uppon Bartholome, his Booke De Proprietatibus Rerum*, ed. Stephen Batman (1582; reprint ed. Schäfer (1976)). For ‘Shakespeare’s encyclopaedia’, see Se

comes in part from attending to how they ask to be used. Encyclopaedic texts also present practical barriers of length, obscurity, and lack of availability; as Samuel Johnson observed, 'A large work is difficult because it is large'.³¹ They are easier, as D'Alembert noted, to browse than to peruse. And to be fair, there is also some truth in what Pliny says about their lack of immediate interest; they point to what they are about rather than to their own vibrancy.³² They are not for all palates. But in general it is not overstating to say that the critical tendency has been to use encyclopaedias less as texts than as containers, and to think of them less as narratives than as databases.

I want to contrast this way of using encyclopaedic texts with another, which I will tendentiously call *reading*, by which I mean the no-less-careful effort to establish (in the sense that an editor establishes a text) the continuities and syntaxes that encyclopaedic texts frequently gloss over in their self-presentations. It is only through the sometimes gruelling process of *reading* earlier encyclopaedic writings that their ironies become visible. When they are read rather than mined – when a user tries to follow a pre-modern encyclopaedic text from point to point rather than following its directions to uproot and resituate its bits of information, irony becomes a pervasive feature in encyclopaedic texts. This is of course not the way that we usually use these early texts now, or indeed use our current encyclopaedias, and it is hard to say how they were used in their original contexts.³³ Certainly many encyclopaedic texts, Athenaeus among them, demonstrate mining as an approach. In *Deipnosophists*, the character Ulpian invariably considers the names of things as isolated bits of information to be sought out and confirmed in other texts; his question is always, 'Is it attested?' A partner in dialogue, Cynulcus, though, continually urges him to turn his attention from words to things and to sustain his enquiry – to consider where his train of thought is going, and how his relentless division of it changes its direction, rather than simply to admire its isolated elements. This double impulse was no doubt at least as available to early readers as it is to modern ones. Histories of reading suggest both an early modern habit

Boyar (1920), responding to a copy of Berthelet's 1535 edition of Trevisa's translation with 'Wm. Shakespeare his booke' forged inside the cover; on its changes, see Greetham (1992); and more narrowly West (2006).

³¹ Cited in Blair (2010) 173.

³² During discussion at the conference on which this volume is based, Neil Rhodes intriguingly suggested that poor style, or at least a profession of it, is actually part of the genre of encyclopaedic writing.

³³ For one remarkable attempt, see Grafton (2004) on early modern uses and imitations of Aulus Gellius' disorganised style.

of excerpting texts and an equally marked ability for heroically sustained reading. Lacking a richer sense of how these texts were used by their first generations of readers, I turn to how encyclopaedic texts are represented in other texts, both other encyclopaedias and elsewhere.

In encyclopaedic writing before the Enlightenment, a single text frequently acted as a source of information and an organisation of knowledge, as well as subverting its informational content through an undercutting narrative structure; like *Deipnosophists* or Robert Burton's *Anatomy of Melancholy*, such works offer both the possibility of continuous narrative and its articulation into unconnected elements. Mined for the latter, they offer serious insight; read for the former, they ironise the project of making it cohere. Seeming to stand outside any frame of reference, an encyclopaedic representation can make sense and be valuable as real knowledge – the names, say, of different kinds of fish so thoroughly detailed in *Deipnosophists*. As such moments accrete, however, into a narrative, that same knowledge is revealed to be in one way or another flawed – as in Cynulcus' objections to Ulpian's exclusively philological concerns at the expense of more real-world knowledge. This distinction, interestingly, is recognised in semantics as the difference between what is called an 'encyclopaedic' definition and a 'dictionary' one; an encyclopaedic definition organises whatever is known about an object so as to specify its reference, while the dictionary definition restricts itself to how a term is used.³⁴ The places to look for the ironies in early modern encyclopaedias, then, are textual *places* in a narrative – not placeless snippets of information, as in the post-Enlightenment encyclopaedic ideal, but elements that have a distinct position in a structure, whatever sort of structure that is: beginnings, endings, centres, turns. The other useful strategy in reading rather than mining is to revise insistently what each of the elements of an encyclopaedia might mean in response to others, and to track how these meanings change.

Post-Enlightenment encyclopaedic writings, notably, generally adopt an arbitrary order and so compel a kind of deracination. Not coincidentally, the post-Enlightenment fictions that parody encyclopaedism tend to build in a narrative framing structure similar to that of earlier encyclopaedic forms to counterweigh their dispersal of information: a template against which the text's places can be recognised. In the nineteenth century, Flaubert's encyclopaedic farce *Bouvard and Pécuchet* ends by collapsing the categories of copying and comprehending, as Bouvard and Pécuchet, having failed to remake themselves, their environment, or the society of their small village

³⁴ Cruse (1988); Eco (1989).

through their radical programme of self-education, turn to copying over the texts they have collected and tried to put into practice. This nineteenth-century debunking of encyclopaedic knowledge requires both a serious, although naïve and unworldly, encyclopaedia and an ironic narrative of its application in the real world. The knowledge that Bouvard and Pécuchet (and Flaubert) deploy is serious and up-to-date, like that of Burton, or earlier, Martianus Capella, later Hegel; taken in isolation, one can in fact learn much from the ‘received ideas’ that Flaubert mocked in the second half of his novel, the *Dictionnaire des idées reçues*. There is nothing immediately idiotic about the beliefs that Bouvard and Pécuchet hold; their ridiculousness only appears within a framing story which reveals their arbitrariness and especially their mutual incommensurability; many arts claim to be the master art, and many systems the master system, and yet they begin from different, even opposite, premises. Their irony is precisely that each of them claims a kind of absolute rightness – even though it may be incommensurable with other equally absolute claims. But this is only apparent when they are set together.

Just as post-Enlightenment fictions have had the most interesting things to say about encyclopaedic tendencies as practices, so encyclopaedic fictions of the Renaissance like those of Rabelais or Burton often express the double functions of encyclopaedic texts – culturally bound versus timeless and eternal, serious versus parodic – more openly than traditional reference works, although such works also offer critiques of their own form. But I want to test this idea against an encyclopaedia that seems as unironic as possible (and it wasn’t as easy as I thought to find one). My instance is the corpus of John Amos Comenius, the great theorist of universal education, Czech or Bohemian by birth but long resident in England and peripatetic throughout Europe, as were his books. The most famous is probably the *Orbis pictus* (1658), an illustrated text for children that taught foreign languages (initially Latin, but subsequently translated into over a dozen modern tongues) by pairing words with pictures of what they represented. But *Orbis pictus* was only a small part of Comenius’ ambitious educational project in *Pansophia*, the acquisition of universal wisdom.

Unlike some of his contemporaries, like Alsted or Kircher, Comenius did not aim at gathering what was already known, but at the development of better teaching methods that would ultimately lead to knowledge of all that was. It is hard to read Comenius as a straightforward parody of learning: he continues to be celebrated by modern educators for some of his proposed reforms (education for all, uniform standards, minimising rote memorisation) and it is equally clear that he was regarded seriously by his

contemporaries, even when, like John Milton, they disagreed with his ideas on education. But taken as a whole, Comenius' vast educational corpus describes an arc not unlike that of the *Anatomy of Melancholy*. After the success of a book offering a new method of language acquisition, *Janua linguarum* (1631), Comenius launched his encyclopaedic project in a preliminary text called *Pansophiae prodromus* (1639). Here Comenius complains that philosophers are 'as Squirrels that are shut into a turning cage, how fast soever they tumble forward, yet are they no farther than they were'.³⁵ The problem, according to Comenius, is a lack of lively connection between the parts of knowledge: 'The most exact Encyclopaedias, or sums of Art, which I could ever lay my eyes upon, seemed to me like a chaine neatly framed of many linkes, but nothing comparable to a perpetuall mover, so artificially made with wheeles, that it turnes it selfe' (24). Along with the disconcerting symmetry of wheel-turning philosopher-squirrels and the perpetually moving wheels that encyclopaedias aspire to be, Comenius favours other destabilising images of encyclopaedism. In another work he describes his method as 'a certaine Pansophicall truly artificial Quadrature of a Circle',³⁶ taking one of the conventional metaphors of encyclopaedism as the circle of knowledge, but twisting it into a squaring of the circle: a figure that increases the project's power (and difficulty) geometrically, but also links it to a project that is now known to be mathematically impossible.

These particular ironies do not derive from Comenius' narrative; they are closer to punchlines than to story problems, although they suggest his awareness of the risks of encyclopaedism. But another irony comes from reading Comenius rather than simply culling information from his works. A recurrent, equally conventional image that Comenius favours is the metaphor of knowledge as a temple, the parts of which he lovingly distinguishes. But Comenius' texts never seem to advance past the gateway. The title of *Janua linguarum*, his first book, proclaims that it is a gate to languages; when it proved too difficult for beginners, Comenius, moving backwards, added a *Vestibulum* (1633) that presented a series of short, catechistic questions designed to bring students to the door. The *Pansophiae prodromus* (1639) a few years later is another preliminary to total knowledge: 'we have not undertaken to write a perfect Pansophy, but onely the Gate thereof, we doe not prosecute all things, (which would be infinite, and farre beyond any one mans abilities) but onely the hinges and bases of all

³⁵ Comenius (1642) 8, *Pansophiae prodromus*, trans. Samuel Hartlib as *A Reformation of Schooles*.

³⁶ Comenius (1651) 112–13, *A Patterne of Universall Knowledge . . . or a Diatyposis*, trans. Jeremy Collier (1651).

things'.³⁷ But although Comenius protests 'that our draught of Pansophie is no dreame, but a reall world', it gets no further than providing a plan for pansophy's temple; the building of it will have to follow.³⁸ But the later *Pansophiae diatyposis* (1645), rather than moving on from the end of *Prodromus*, recapitulates its conclusions and then cycles back to its beginning arguments. It ends no closer to pansophy, but with the promise to publish a 'Skeleton of all Pansophy' that can serve as yet another outline.

Other books follow, each one reforming the forms without proceeding to the contents of pansophy, culminating in Comenius' posthumous *De rerum humanarum emendatione consultatio Catholica* (1688), which yet again, in more exhaustive detail, outlines the steps that will be necessary to achieve the encyclopaedic ideal.³⁹ Its final section, foreshadowed in Comenius' various gateways and pictured worlds, is a *Lexicon reale pansophicum*. This proves to be a perfectly ordinary dictionary, with the exception that it fails to define many of its words, listing only their lemmata. Comenius' claims to continuity are belied by the sequence of his own texts, which ends in the radical discontinuity of the lexicon that he began his career by criticising. Taken a page at a time, Comenius' encyclopaedic writings are hopeful, inspiring, promising in every sense, and in many cases usable, in particular the earlier works that to him seemed to be failing to achieve pansophy. But when his corpus is actually followed rather than either cherry-picked for pertinent examples or imagined as a whole, it demonstrates the impossibility of fulfilling its promises. More exactly, it shows that his encyclopaedic writing cycles backwards. While claiming to move toward completeness, each of Comenius' texts has to retreat, to complete a previously unnoticed hole earlier in the structure he has projected.

Comenius' failure to bring any of these works to completion, or even really to begin them properly – Leibniz had a similar problem, leaving in his papers multiple prefaces, plans, and even title pages for encyclopaedias he never wrote⁴⁰ – is not merely accidental, but inherent in his project to capture and

³⁷ Comenius (1642) 53: *Quia tamen non Pansophiam, sed Pansophiae januam scribere suscepimus, non omnia omnino persequimur, (quod infinitae esset operae, & longe supra unius hominis vires) omnium tantummodo cardines & bases.*

³⁸ Comenius (1642) 66, where it is attributed to Comenius as a 'Dilucidation' against objections; I do not find it in the original Latin text.

³⁹ The publication history of *De rerum humanarum emendatione consultatio Catholica* is itself almost an allegory of deferral. Comenius was still at work on it when he died, and it remained in manuscript. It was lost at some point after the 1780s, resurfaced in 1935, then disappeared again until it was returned to the Czechoslovakian state by the DDR in 1957. Its *editio princeps* of 1966 records its afterlife (10).

⁴⁰ Leibniz's prefaces for several possible encyclopaedias are included in *Opusculi et Fragmenta Inédits de Leibniz*, Leibniz (1903) ed. Couturat, 30–41, 214–15, 416–35, and 511–15.

convey not just knowledge of a particular kind, but all knowledge under all circumstances, *omnia omnes omnino*. It would be a mistake, I think, to ask to whom the irony of Comenius' texts belongs, as if one could easily tease apart the intentionality of a Comenius from that of a more slit-eyed modern reader, or call it a mere trick of fate that Comenius' repeated beginnings never succeeded in moving his project forward. But irony in a text is a formal property as well as an intentional one, and ironies emerge from any reading of Comenius' texts which is invested seriously enough in its encyclopaedic totality to recognise how its claim to comprehensiveness defeats itself, as disorders, contradictions and omissions inevitably mar its absoluteness. At the same time, though, it is the claim to grasp everything that provides the text with its energy and drive, even if that drive refuses to be purposefully harnessed.⁴¹ To notice this is not to import something that the text overlooks; any reading that passes a certain threshold of immersion will uncover these obstacles that I am calling ironies, including the reading of a sincere compiler like Comenius or Hartlib. Otherwise, why return over and over to a newer beginning? But because we tend to mine encyclopaedic texts or projects like Comenius' in either very small or very large scale, as excerpts or as theories of knowledge, we also tend to look past their narrative structures, where their verve for accumulation shows itself, as Comenius himself worried, freely and idly wheeling like philosopher-squirrels in their cages.

I have hinted that the ironic attitude of early encyclopaedias is eventually displaced onto encyclopaedic fictions, while the production and organisation of knowledge is restricted to serious encyclopaedias. In this I follow Horkheimer and Adorno's observation that, 'For the Enlightenment, anything which cannot be resolved into numbers, and ultimately into one, is illusion; modern positivism consigns it to poetry.'⁴² Encyclopaedic ironies may be more visible in more recent writers of fiction because it is writers like Borges or Pynchon who continue to scrutinise these gappy, difficult texts for something besides their contents. To select a moment of Enlightenment at which irony was effectively banished to fictions of encyclopaedism from the broader category of encyclopaedic writing is, like Comenius' attempts to achieve pansophy by finding a place to start, probably fruitless. A good candidate, though, might be the never-quite realised correspondence between

⁴¹ Calvino (1988) 117 makes a similar observation a founding moment of modern fiction: 'Literature remains alive only if we set ourselves immeasurable goals, far beyond all hope of achievement'.

⁴² Horkheimer and Adorno (2002) 4–5.

John Locke and Gottfried Wilhelm Leibniz on the relation of the disciplines. Leibniz read with concern Locke's *Essay on Human Understanding* (1690), especially its concluding chapter of the 'On the Division of the Sciences', which arranged the branches of learning along surprisingly conventional lines, according to the ends that they sought: physical, practical, and semiotic or logical. For Leibniz, as Daniel Selcer has recently argued, the encyclopaedia demanded a perfect continuity among its parts, which could be realised only if every element in it expressed the whole structure, from its own unique situation within the entire structure. His encyclopaedias – or more accurately his multiple attempts to initiate them – thus mirrored his metaphysics.⁴³ Leibniz was alive to the potential ironies of his encyclopaedic projects, although he was no less committed to them, and recognised that an encyclopaedia became more and more difficult to use as it approached perfection: 'the greater the mass that the collected materials make, the less of use they were'.⁴⁴ Since for Leibniz the elements of the universe were entailed simultaneously in reality and in thought, he was particularly opposed to Locke's insistence that proper reasoning was instrumental, and was confined to ideas that were clear and distinct.

In a sense, though, Leibniz, the great prophet of continuity, failed to read Locke continuously enough. For in practice, Locke's ideal of clear and distinct thought was demonstrably subverted by the actual confused processes of ordinary thinking. To give just one example, Locke ends the second book of the *Essay* by discussing the 'Association of Ideas' and showing how irrationally it works:

Instances of this kind are so plentiful everywhere, that if I add one more, it is only for the pleasant oddness of it. It is of a young gentleman, who having learnt to dance, and that to great perfection, there happened to stand an old trunk in the room where he learnt. The idea of this remarkable piece of household stuff had so mixed itself with the turns and steps of all his dances, that though in that chamber he could dance excellently well, yet it was only whilst that trunk was there; nor could he perform well in any other place, unless that or some such other trunk had its due position in the room.⁴⁵

This 'instance' is ambivalent about the conclusions that can be drawn from it; Locke claims that he adds it only for its anomaly, its 'pleasant oddness'. The young man's associations are presented as non-rational, but Locke's

⁴³ Selcer (2007).

⁴⁴ *Ubi quanto majorem massam conficiunt res collectae, tanto minus usui erant*, from 'Préface d'Encyclopédie' (editor's title), in Leibniz (1903) 214.

⁴⁵ *An Essay Concerning Human Understanding*, Locke (1894) I, 533 (ed. Fraser).

own association of ideas in producing this example, although no more motivated, is turned by his text into a clear example of unclear thinking.

Arguably practical problems like these led Locke to what he described as ‘this discontinued way of writing’,⁴⁶ that is, the essay rather than an encyclopaedia: clarity and distinctness might be praised, described, and sought, but the tracks of the mind were much more devious because while they promised the possibility of including everything, they also threatened to link anything, arbitrarily – again, *omnia omnes omnino*. This problem may also explain why the division of knowledge is given such short and conventional shrift at the *Essay*’s end – to try to prescribe its articulation is more or less pointless, because, insofar as they are clear and distinct, the divisions cannot predict the contingent associations that empirically structure ideas. Locke’s realignment of thought, so that its goal is not knowledge that can be grasped as an object so much as a process of knowing to be worked through, is one of his philosophy’s turning points. Reasoning must be precise; it is nested, though, in a domain characterised by much fuzzier mental activity. The continuity Leibniz understood as necessary for encyclopaedic thinking seems to Locke its major liability. Locke in a way deploys the irony of the young man’s, and his own, position to express how encyclopaedism must fail. Leibniz’s encyclopaedic monads are both separate and absolutely transparent, allowing no ironic position at all (except perhaps the cosmic irony that Leibniz’s many beginnings of an encyclopaedia could never be sustained for more than a few pages). For Leibniz, self-conscious irony is not merely practically but theoretically eschewed with regard to the encyclopaedia. But it emerges in narratives like those of Locke’s young man dancing, embedded in the larger arc of Locke’s essay. Over the years of the eighteenth century, the irony of encyclopaedic pretensions to knowledge becomes more and more firmly fixed in the realm of fiction.

If earlier compilers paid for their desire to grasp all knowledge by setting the work of compiling under the sign of its impossibility, and if encyclopaedists of the Enlightenment suppressed earlier ambivalences about the encyclopaedic project in favour of hope, for the twenty-first century literature has become the last refuge of an encyclopaedism that can be taken seriously. Contemporary encyclopaedic fictions literally promise the world, in (for instance) the labyrinthine library of a medieval monastery, the silent communion of midnight’s children, a dictionary of the Khazars, the poly-mathic eighteenth-century of Mason and Dixon, or an underworld in which

⁴⁶ Locke (1894) ‘Epistle to the Reader’, I, 10. Locke refers both to the fitful process of his writing and to the disconnected form of the product.

baseball, garbage, and art connect and ramify.⁴⁷ Such encyclopaedic works seek to be unbounded by the domesticating linearity of earlier forms like the novel; reaching beyond what can merely be grasped by the human mind, they suggest to their explorers, writers, and readers a way to understand or at least examine a world that seems to be splintering into fragments, even as they insist on the inadequacy of human consciousness to grapple with it.⁴⁸ If the representation of the world has increasingly come to seem beyond the reach of any individual mind, individual nodes of encyclopaedic density within it propose an alternative where everything can be stored until the time is right to retrieve it.⁴⁹ We read such encyclopaedic writings to be reassured that absolute knowledge is not, after all, possible; that we can be forgiven for failing to grasp it. We are not disappointed by their ironisation. We may even be relieved by their shortcomings.

Contemporary encyclopaedism needs no effort to ironise it – in the twenty-first century an encyclopaedia as imagined by Poliziano or Bacon must be unthinkable except as a fiction. The last print edition of the *Encyclopaedia Britannica* (15th edition, 1974–85) returned with almost comic sincerity to a logical arrangement of knowledge that could nearly have been lifted from a work five hundred years older, but without the frisson of impossibility: reporting on the great 11th edition, it observed that the earlier edition had sought to move the encyclopaedia beyond a ‘storehouse of facts’ to ‘a systematic survey of all departments of knowledge’ but ‘did not fully succeed in achieving its objective’.⁵⁰ As a remedy, it proposed a new topical arrangement into a *Micropaedia* of shorter entries for ‘Ready Reference’, a *Macropaedia* of longer articles to provide ‘Knowledge in Depth’, and a *Propaedia* described, in metaphors that could have been taken from Comenius, as a ‘preamble or antechamber to the world of learning’.⁵¹ Although the *Propaedia* argues that a logical and objective organisation of knowledge

⁴⁷ I am thinking here specifically but not exclusively of Eco’s *The Name of the Rose*, Rushdie’s *Midnight’s Children*, Pavić’s *Dictionary of the Khazars*, Pynchon’s *Mason and Dixon*, and DeLillo’s *Underworld*.

⁴⁸ See, e.g., Castoriadis (1997); and Tabbi (2002), 32–50. Compare James Wood’s criticism of contemporary novels that ‘know a thousand things but do not know a single human being’: ‘Tell Me How Does It Feel?’, *The Guardian* (October 6, 2001).

⁴⁹ Jean-François Lyotard introduced the idea that the postmodern condition was in part characterised by the disappearance of explanatory ‘master narratives’ in Lyotard (1983); Fredric Jameson’s counterclaim is that the loss of master narratives has distanced modern societies from relating to the world as agents: Jameson (1991). However valorised, the archive is one alternative to narrative.

⁵⁰ *Encyclopaedia Britannica* (15th edition), *Propaedia*, 5, quoting the 11th edition.

⁵¹ The descriptions of the *Micro-* and *Macropaediae* are on the spines of the volumes; the description of the *Propaedia* is from *Encyclopaedia Britannica* (15th edition), *Propaedia*, 5. For another view of the last *Britannica*, see Blair (2010) 172.

is possible, sort of – the bet-hedging tone is the *Britannica*'s, not mine – this organisation was gamely revised after ten years when it, too, apparently failed to achieve its objective. The latest web-based version of the *Britannica* shows no trace of this last gasp. Encyclopaedic discourse can no longer claim absolute knowledge – *omnes omnia omnino* – for itself, but continues to insist on its location elsewhere, in fictions that simultaneously reach for everything and recognise their ironic shortfalls.

PART IV

Chinese encyclopaedism: a postscript

Introduction

Chinese ‘encyclopaedias’, known in the Chinese language as *leishu* 類書 (literally, classified writings), are by definition compendia in which materials of some length are quoted from written sources and arranged according to a systematic set of categories and subcategories.¹ Generally speaking, *leishu* are composed of quotations or lengthier citations from other sources such as the Chinese classics, official histories of dynastic era,² and well-known prose and verse works of the past. One may consider *leishu* as anthologies; *leishu* consist of large numbers of excerpts from primary sources rather than specially written exposés. But the name ‘encyclopaedia’ seems fitting because *leishu* may indeed comprise the whole realm of knowledge at a given point in time.³ The categorical arrangement of the excerpted material is usually by subject or genre, and sometimes by rhyme.⁴

The first Chinese encyclopaedias were issued from the third century (CE);⁵ they were compiled for the purpose of providing the emperor and his ministers with a quick source for finding moral and political precedents. The earliest known encyclopaedia, the *Huang lan* 皇覽 (*Emperor’s mirror*) was produced under imperial auspices around 220 during the Wei 魏 dynasty (220–65), but it is no longer in existence. Between the third and eighteenth centuries, some six hundred *leishu* were compiled, of which only two hundred are still extant.⁶ Wilkinson estimates that historians and literary specialists nowadays use ten to twenty of these works to find texts and data not available elsewhere. Encyclopaedias are also informative about how the Chinese literate elite predicated moral and social norms, and bestowed the Confucian heritage from one era to the next.

¹ General discussions of Chinese encyclopaedias may be found in Wilkinson (2000) 601–11; Zurndorfer (1995) 243–58. See also Bauer (1966) 665–91.

² The chronology of Chinese history is based on dynasties, each of which was dominated by a particular ruling family. Each dynasty has an official or ‘standard’ history.

³ Deng and Biggerstaff (1969) 106.

⁴ I.e., with the first or last character of each phrase arranged according to the 106 ‘finals’ of Chinese sounds and tones: see Deng and Biggerstaff (1969) 319.

⁵ All dates for dynasties are CE unless otherwise noted. ⁶ Wilkinson (2000) 602–3.

Over time, the contents of *leishu* took on different directions. Some *leishu* were intended as educational texts, i.e. reference aids to help pass the civil-service examinations. Some covered a particular branch of literature (say history or belles-lettres) while others focused on specialist learning. Some *leishu* were more lexicographical, and served as guides to composition, featuring histories of phrases useful for letter-writing or the drafting of official documents. Chinese encyclopaedias could also gather literary or biographical anecdotes as well as administrative documents or Buddhist or Daoist facts and ideas. They could be concise (like an ordinary vade mecum) or extensive, including thousands of chapters. Their compilers also varied from only one scholar, to thousands employed by the state.⁷

From around the year 1400, during the Ming 明 dynasty (1368–1644), when written knowledge began to spread beyond the small circle of the literati elite, common people began to consult an entirely different kind of encyclopaedia, *riyong leishu* 日用類書 (encyclopaedias of daily use). These were compilations of practical information for people with minimal literacy (e.g. merchants) who were not primarily concerned with mastering the Confucian heritage. But the scholarly *leishu* tradition also endured, culminating in the mammoth *Qinding Gujin tushu jicheng* 欽定古今圖書集成 (*Imperially approved synthesis of books and illustrations past and present*), compiled by Chen Menglei 陳夢雷 (with others), and completed around 1728. It contains 100 million characters on 852,408 pages, in 5,020 volumes, with materials classified under 6,019 categories.⁸

Tracing the history of Chinese encyclopaedias affords one the opportunity to consider how the learned world of imperial China pursued knowledge, and to evaluate the contexts in which ordinary people also created meaningful frameworks for classifying information. In this essay, we will explore the implications of these two kinds of encyclopaedia for Chinese intellectual development. Our goal is to demonstrate that the Chinese approach to classifying knowledge conforms to a particular discursive framework which enabled both scholars and others to make sense of their world around them.

The Chinese learned world and the origins of *leishu*

Although the first known *leishu* appeared long after China's 'axial age', that is the philosophically brilliant 'Warring States' era (475–221 BCE) when a host of dynamic schools – Legalist, Daoist, Mohist, Confucian, and

⁷ Drège (2007) 19–36. ⁸ Wilkinson (2000) 605; Dewoskin (1986) 527.

others – dominated the intellectual landscape, one may argue that their intellectual parameters were formulated then. According to Mark Lewis, there was from that time a certain urge ‘or dream of writing the world into a single text’.⁹ He considers such textual mastery as ‘encyclopaedic’ because it presented a “‘cycle of learning”, grand schemes that led the reader through an ordered, often hierarchical sequence including all essential knowledge’.¹⁰ The implication of the ‘dream’ was that one turned to the future to achieve the ideal of a compiled knowledge. But this ‘dream’ was never fulfilled. With the end of the Warring States era came the Qin 秦 (221–206 BCE) dynasty, which in its goal to unify the empire, destroyed (by fire) writings considered by both the emperor Qin Shi Huang 秦始皇 (259–10 BCE) and the Legalist official and scholar Li Si 李斯 (280–08 BCE), as contentious and not in conformity with Qin political aims. In their quest to gain cultural and political authority, these men privileged the unity of textual traditions in terms of content (with a priority toward Legalism) expressed in a standardised writing script.

Nowadays, scholars regard this episode as a turning point in Chinese history, not only because of the direct damage to China’s heritage, but also because of the subsequent problems that the recovery of the lost books generated. Although the next dynastic era under the Han 漢, beginning in 202 BCE, aimed to salvage the destruction, and did promote the retrieval of ancient works, such efforts arguably also did harm in the long run. As Lewis suggests, the Han scholarly reconstruction which ‘involved piecing together lost texts, rearranging their contents, and even fabricating missing elements, all on the basis of dubious inferences and subjective editions’,¹¹ in effect cast doubt on the authenticity of what was restored. Moreover, because such efforts gave preference to Confucian texts, the wider and more diverse collections of late Warring States writings were excluded from the emerging ‘canon’ that Han bibliophiles and officials began to create according to a vision which prized the ‘Golden Age’ of the era preceding the Warring States, the ‘Spring and Autumn Period’ of the Zhou 周 dynasty (722–481 BCE). Now, instead of compiling for the future, scholars assembled materials ‘to ground political programs in an imagined antiquity’.¹² Utilising the commentarial traditions of canonical Confucian writings, Han scholarship did provide the foundation of a unified empire, but fixed in the cultural authority of these particular texts, and with a reverence for an idealised past.¹³

⁹ Lewis (1999) 287. ¹⁰ Lewis (1999) 287.

¹¹ McNeely and Woverton (2008) 27 referring to Lewis (1999) 325–31.

¹² Lewis (1999) 338. ¹³ Lewis (1999) 338–9.

Another effect of the Qin bibliocaust was a pervasive interest in bibliographic science with functional approaches to library organisation and generic classification.¹⁴ Han dynasty bibliophiles actively sought to retrieve knowledge believed lost. Their work was both ‘retrospective’ and ‘prospective’: on the one hand, finding, inventorying, correcting and explicating writings, and on the other hand, looking after the practical organisation and classification of books for contemporary use and preservation.¹⁵ Such efforts also led Han scholars to create lexical aids which anticipated *leishu* features. For example, Liu Xi’s 劉熙 lexicon *Shiming* 釋名 (*Explication of names*; c. CE 200) quoted terms in their original contexts; it took sentences from original documents and reorganised them into groups of similar terms and phrases.¹⁶ Another important legacy of the *Shiming* was its organisation of subject matter according to the hierarchy: Heaven–Earth–Spirits–Superior Men–Ordinary Men–Animals–Things.¹⁷ Following this sequence of topics, most general Chinese encyclopaedias begin with ‘Heaven’, and then Earth (geographical, geological, administrative features) to Man referring to people, and after that material goods (utensils, weapons), and so on.

This tendency to order subject matter according to categories and topics, rather than pronunciation or Chinese graphic features, and the preference to explicate terms by quoting them *in situ* (and thus relying on comparison and contrast with occurrences of the term or with similar terms) reflect both the need to safeguard documentation and the complexity of the Chinese language. Because there was an absence of morphemes in ancient Chinese, it was more difficult to construct an abstract from the originally concrete expression through an addition of suffixes or otherwise. But a complicated abstract relation could be made clearer in another manner, i.e. by fitting together a complex of historical and literary allusions which illustrated an idea or concept.¹⁸ Thus, these first dictionaries led to the ideal of ‘concept building’ that was reproduced in *leishu* by which order topics were listed, or put side by side.

The first *leishu*

Information about the earliest *leishu* is scanty. What is known about the *Huang lan* originates in the references cited in later texts. Cao Pi 曹丕,

¹⁴ Dewoskin (1986) 526–7. See also Jiang Shuyong (2007).

¹⁵ Dewoskin (1986) 527. Given the fragile quality of Chinese writing materials, bamboo and silk, this was no mean task.

¹⁶ Miller (1999). ¹⁷ Bauer (1966) 671; Dewoskin (1986) 527. ¹⁸ Bauer (1966) 668.

the first emperor of the Wei dynasty, and who reigned 220–6, ordered this compilation upon his accession to the throne. He wanted his officials to collect all the available classical philosophical texts and their commentaries, and to arrange them in ‘successive categories’ (*suilei xiangcong* 隨類相從). In bibliographic essays in surviving histories dating from the third to ninth centuries the *Huang lan* was mentioned, and some fragments did survive in other collectanea, but by the year 1000 the complete version was definitively known to be lost.¹⁹

Factual data about other *leishu* appearing somewhat later are easier to acquire because from the time of the Sui 隋 (581–618) dynasty, official histories contained bibliographic essays about the contents of imperial library collections. The oldest preserved encyclopaedia is the 612 compilation *Bianzhu* 編珠 (*Stringed pearls*) which collected materials for the writing of poetry and essays.²⁰ In the seventh century a number of important *leishu* were assembled that manifested the practical needs of individuals preparing for the civil service examinations and officialdom. The first of these encyclopaedias is the *Beitang shuchao* 北堂書鈔 (*Excerpts from books in the Northern Hall*), compiled c. 630. It deals mainly with government topics, and in particular matters related to the personnel and rituals of the dynastic courts preceding the Tang 唐 dynasty (618–907). Other important *leishu* originating in the same era were the *Yiwen leiju* 藝文類聚 (*Collection of literature arranged by categories*; c. 660), compiled as a sourcebook for the composition of essays, and the *Chuxue ji* 初學記 (*Writings for elementary instruction*; 713–42), organised to provide beginning students with a general foundation of knowledge.

By the end of the seventh century, according to Dewoskin, there were two trends affecting *leishu* collections. On the one hand, the size of these encyclopaedias increased, and on the other hand, compilers no longer aimed for comprehensiveness, and began to specialise. Thus, one finds Buddhist encyclopaedias such as the *Fayuan zhulin* 法苑珠林 (*Grove of pearls in the Dharma Garden*; 668?) drawing upon indigenous Chinese sources, both Buddhist and non-Buddhist, but confined to topics about Buddhism and its development in China.²¹ Also, exemplary of these developments was

¹⁹ Drège (2007) 24 finds evidence to trace the *Huang lan*’s history until its final disappearance. For further information about other early encyclopaedias, see Kurz (2001), and Kurz (2003).

²⁰ Hu Daojing (1982) 59–64. The *Bianzhu* was the second of 65 *leishu* recognised by the editors of the massive eighteenth *Siku quanshu* compilation to be worthy of inclusion. See more on this compilation below.

²¹ Dewoskin (1986); Teiser (1985) indicates how this particular encyclopaedia is a treasure trove of information about women’s roles in Buddhism.

the colossal compilation by Du You 杜佑 (735–812), *Tongdian* 通典 (*Encyclopaedic history of institutions*; 801) which concentrated on texts of political and administrative importance.²² It assembled many disparate sources and divided them into nine main subject headings: food and money, the examination system, official titles, rites, music, the army, punishments, provincial administration, and border defence.²³

This trend toward specialisation reached a stage of maturation in the Song 宋 dynasty (960–1279) when Li Fang 李昉 (925–96) compiled under imperial sponsorship three important *leishu*: *Taiping guangji* 太平廣記 (*Extensive gleanings of the Reign of the Great*; 978; hereafter, TPGJ), *Taiping yulan* 太平禦覽 (*Imperial digest of the Reign of the Great*; 983; hereafter, TPYL), and *Wenyuan yinghua* 文苑英華 (*Finest flowers of the preserve of letters*; 987). These three *leishu* represented the cultural patronage that the second Song dynasty emperor, Taizong 太宗 (r. 976–97) offered to his officials and subjects.²⁴ He focused on the re-establishment of cultural and literary traditions that had declined during the turbulent years before the dynastic founding, and aimed to connect the Song dynasty with the literary heritage of earlier dynastic eras.²⁵ It would also seem Song Taizong had a personal motive in ordering the compilation of these *leishu*: ‘I want to have an outline that directs me in my rule, and I feel ashamed, that I do not possess profound knowledge of historical precedents. Since the days of old there have been works to be read by emperors (*yulan* 禦覽), but their sections and categories are so numerous that they are difficult to peruse.’²⁶ As the modern scholar Johannes Kurz notes, this quotation indicates this emperor’s understanding of the value of *leishu*: they were useful both as a digest of historical sources for government practice and a demonstration of imperial support and promotion of Chinese literary legacy.²⁷ Song Taizong’s patronage was also a manifestation of the civil orientation of his regime that had been founded by military commanders originating in the north of the country. The *leishu* projects brought northern and southern officials together within the same bureaucracy.²⁸

The TPYL and the TPGJ were compiled concurrently by Li Fang and his editorial team. Material considered related to the broad category of history was included in the TPYL, and the rest went into the TPGJ. The

²² Dewoskin (1986) 528. ²³ Wilkinson (2000) 525.

²⁴ His predecessor and elder brother Song Taizu, the founder of the dynasty, was a military figure, preoccupied with uniting his empire.

²⁵ On the Tang imperial library and its near destruction at the end of the dynasty, see Drège (1991).

²⁶ Translated and cited by Kurz (2007) 45. ²⁷ Kurz (2007) 45. ²⁸ Kurz (2007) 66.

TPYL, divided into 55 broad categories, and further subdivided totaling c. 5,000 topics, followed the 'Heaven–Earth–Man' arrangement, and excerpted 2,000 books and minor writings, most of which are no longer extant.²⁹ The TPGJ was a thematically ordered compendium of *xiaoshuo* 小說 ('insignificant tellings' [fiction]) of the preceding millennium in 500 *juan* 卷 (chapters). Almost immediately after the TPGJ was completed in written form in anticipation of the carving of its wooden blocks for printing, the Song government, on the advice of scholars, suspended its publication.³⁰ This episode illustrates the naïveté of the early Song court about the status of 'trivial literature', which besides *xiaoshuo*, includes the categories of fictional writing *yeshi* 野史 (unofficial histories) and *chuanqi* 傳奇 (tales).³¹ Although some fiction was tolerated as 'muddled history', it was improper for the state to encourage its promotion, and thus the TPGJ was ultimately rejected as a government-sponsored *leishu*. The third *leishu*, the *Wenyuan yinghua*, in both title and contents was a true florilegium, an anthology of poetry, odes, and songs, as well as writings linked to the civil service, including not only examination questions but also government-related documentation such as legal judgements, reports, public notifications, dispatches, petitions, deliberations, and so on. One may see this work as 'a guide to polite letters'.³²

These three *leishu* were later associated with a fourth Song dynasty encyclopaedia, *Cefu yuangui* 冊府元龜 (*Models from the archives*; completed in 1013), to form what became known as the 'Four Great Books of the Song'.³³ *Cefu yuangui*, composed of 31 main sections, and 1,104 subsections, was in essence a handbook for model government, containing historical precedents by which the emperor and his officials could make decisions. Unlike the TPYL which focused on recovering lost writings disregarded or neglected in preceding dynastic eras, the *Cefu yuangui* was a 'hands-on' guide to the political and administrative practices of imperial government.³⁴ The *Models from the archives* lacked any reference to phenomena of the natural world (plants, animals, etc.).

²⁹ Chan (1986) 746.

³⁰ The text survived in manuscript form and was printed later in the Ming dynasty: see Nienhauser (1986a) 745. The TPYL was also available only in handwritten manuscript at first, but it was printed several decades after its compilation: see Kurz (2007) 54–5.

³¹ The Chinese learned tradition does not value fiction as a way to express higher truths that lie beyond the realm of mere fact. As Idema and Haft (1997) 56 note: 'On the contrary, fiction is condemned as by definition misleading and inciting to moral corruption'. Thus forms of fiction such as the story, novel, narrative ballad, drama, were traditionally excluded *ipso facto* from the realm of literature, while anecdotes, myths, and legends could be acceptable if they were presented as historical actualities.

³² Kroll (1986) 898.

³³ Guo Baigong (1940).

³⁴ Kurz (2007) 62.

These four gigantic works were the last Song dynasty-sponsored *leishu*. After the issue of the *Cefu yuangui*, much historical and literary scholarship slipped away from imperial control into the realm of private printing.³⁵ During the second half of the Song era when imperial power was weak, individual scholars started to monopolise encyclopaedia production for the promotion of their own ideas and philosophies.³⁶ And with the spread of block-printing at this time, they could use commercial book printers to help them in this endeavour.

Leishu in late imperial China

From the twelfth century, both the number and the size of *leishu* proliferated as the commercial printing industry expanded.³⁷ All these phenomena may be attributed to the explosive development of the civil service examination system. The twelve-fold increase in *leishu* numbers was recorded by contemporary scholars in the bibliographic treatise of the official history of the Song dynasty, completed in 1345. They compared what was available at the close of that dynasty with what *leishu* existed at the end of the Tang era.³⁸ This increase in *leishu* numbers coincided with a gradual shift from officially sponsored compilations at court to commercial print shops in the provinces as the primary producers and distributors of these works.³⁹ Jianyang in northern Fujian province (also known as Minbei), with its natural resources (plentiful wood for printing blocks, soot from burnt pine trees for ink, and bamboo forests for paper making), and its easy access to rivers extending to other regions, became the chief printing centre during the Song and Yuan 元 (1279–1368) eras.⁴⁰ It would also seem that printers in this locale were able to produce their books more cheaply than any of

³⁵ The origins of printing in China lie in the reproduction of Buddhist texts and images which led to the printing of common use items such as almanacs, calendars, and funeral money: see Zhang Xiumin (1989) 10–53. For further discussions on printing during the Tang, see Barrett (2008); and during the Song, see Cherniack (1994). Also relevant is the collection of studies in Pierson and Wilson (2006).

³⁶ Competition among scholars to get encyclopaedias to publish their ideas, is discussed by Tillman (1990–2).

³⁷ Here commercial printing denotes publishers not known for printing works under official auspices or for a religious organisation, and whose imprints often have some indication that they were meant to be sold in an open market: see Chia (2003) 446n2.

³⁸ Drège (1994). ³⁹ Chia (2002); DeWeerd (2007a).

⁴⁰ Other important printing centres at this time were Hangzhou (the capital) and Chengdu (Sichuan) in the western part of the country.

the other major urban publishing centers in the country at that time, due to lower labour costs.⁴¹

As for the examination system, it is known that the number of candidate-participants at the lowest level grew from about 20,000 in the early eleventh century to over 400,000 in the mid-thirteenth.⁴² This escalation translated into rising numbers of consumers in need of a new kind of *leishu* 'text-book' that catered to students and their instructors. While the selection of topics that these *leishu* focused upon, such as taxation, grain transport, salt monopoly, or land distribution was familiar (not unlike that in the *Cefu yuangui*), the organisation of this 'textbook' variant was 'leaner' and more pedagogically orientated. A *leishu* of this period *Lidai zhidu xiangshuo* 歷代制度詳說 (*Detailed explanations of institutions throughout the ages*; c. 1180), recently studied by Hilde De Weerd, exemplifies this learning direction. 'Each chapter is divided into two parts: quotations from primary sources and explanations. The first part quotes primary source materials on the topic, usually arranged by subheading and in chronological order . . . while [t]he explanatory part reviews trends in the history of the institution concerned, and raises problems related to past and present regulations developed to organise the institution in question'.⁴³ The *leishu* exposed the student-reader to the analysis of contemporary policy questions based on comprehensive archival research which had been carefully presented in the primary documents. De Weerd also considers this particular *leishu* illustrative of what she calls a growing 'archive mentality' which distinguished between primary source selections and interpretive prose, and which embodied the notion that both knowledge and argument need to be grounded in identifiable prior records.⁴⁴

Lucille Chia's investigation of Jianyang *leishu*, using extant library catalogues, also points out the relatively high numbers of these works geared toward examination study produced in commercial editions.⁴⁵ She has found that many copies of these encyclopaedias illustrate the widely deplored *mashaben* 麻沙本 (inferior production) appearance, often with a cramped page layout squeezing too many characters on one page, and badly printed characters. Although these *leishu* packed in plenty of information, the contents were not always accurate.⁴⁶ Such low-quality production might

⁴¹ Chia (2002) 8. Another reason for the *leishu* 'boom', aside from the growing popularity of the examination system, may have been, as DeWeerd (2007b) argues, the 1120 invasion of north China and its loss to a nomadic dynasty the Jin 金 (1115–1234), which stimulated greater interest in document preservation through private printing.

⁴² Chaffee (1995). ⁴³ De Weerd (2007a) 82. ⁴⁴ De Weerd (2007a) 97.

⁴⁵ Chia (2002) 100. She has uncovered 190 extant Song-era Jianyang imprints.

⁴⁶ Chia (2002) 116–17.

be due to the monopolistic book trade at this time: Jianyang printers could afford to deliver shoddy merchandise because there was little competition from elsewhere.

However, not all *leishu* printed in the Song and Yuan eras were examination textbooks. With more and more men preparing for the examination system, the literacy rate rose and a general interest in texts and book culture increased. Literati began to need compositional aids, phrase dictionaries and writing manuals that would improve their communication skills. Chia considers these two types of works also *leishu*. According to her research, Jianyang printers printed nine types of *leishu*: (1) general; (2) examination; (3) writing manuals; (4) poetry; (5) literary phrase references; (6) surnames; (7) stories and anecdotes; (8) daily use; (9) primers.⁴⁷ While only the first three categories predominated *leishu* printing during the Song era in Jianyang, elsewhere in China intellectuals produced encyclopaedias that resonated with the aims of earlier compilers. A number of Song scholars sought ways to integrate past and present knowledge. Pan Zimu 潘自牧 (fl.1150)'s *Jizuan yuanhai* 記纂淵海 (*Complete source for composition*; 1209 preface) illustrates this trend. Pan, a literatus from Wuzhou 婺州 (Zhejiang province) was a member of a cohort of late Song scholars whose intellectual horizons went beyond the narrow confines of examination study. The *Jizuan yuanhai* classifies 22 categories of information and 1,246 subcategories in 236 *juan* (about 800,000 words).⁴⁸ Citations in this *leishu* are grouped according to the following sequence: the classics, schools of thought, histories, biographical anecdotes, literary collections, and an unprecedented category, 'authors of our dynasty', which means here those writers of the Song era. The implication of this arrangement is the author's intention to demonstrate continuity between antiquity and his own lifetime.⁴⁹

Despite these achievements in *leishu* production in the Song-Yuan era, it was during the Ming dynasty (1368–1644) that Chinese encyclopaedias realised ever greater sophistication, in form, contents, and appearance. Once again, it was the government which initially fostered interest in the value of encyclopaedia compilation. In a well-publicised effort to reintegrate learning, the Ming regime during its first decades sponsored a huge project to preserve ancient texts, culminating in the *Yongle dadian* 永樂大典 (*Yongle*

⁴⁷ Chia (2002) 315. ⁴⁸ On this author and his encyclopaedia, see Bol (1996).

⁴⁹ Bol (1996) 39. On the shift away from encyclopaedism tied to educational curricula towards the accumulation of knowledge across a broader range of topics in Renaissance Europe, see the essay by Blair in chapter 18.

encyclopaedia; completed in 1408).⁵⁰ This was the largest *leishu* ever compiled in China, with an estimated total of 370 million characters. 7–8,000 works from the Spring and Autumn period to the early Ming were copied into this imperially backed attempt to save for posterity the sum total of all Chinese written knowledge. It consisted of about 22,900 chapters in 11,000 volumes. In its organisation the *Yongle dadian* differed entirely from all earlier encyclopaedias, because it was ordered phonetically (like a dictionary) according to 76 rhymes under which the individual headings were treated.⁵¹ Some 2,170 scholars worked for 4 years on the encyclopaedia. But once this work was finished, under the supervision of chief editor Yao Guangxiao 姚廣孝, there was no money in the imperial treasury to print it.⁵² And by the end of the dynasty, the original manuscript was almost entirely lost.⁵³

During the Ming dynasty woodblock printing became ever more sophisticated and so it is not uncommon to find contemporary *leishu* featuring complex illustrations and detailed maps. Two of the best known encyclopaedias from this time exemplify this trend. The *Sancai tuhui* 三才圖會 (*Assembled pictures of the three realms* [Heaven, Earth, and Man], 1607), compiled by Wang Qi 王圻, was a general encyclopaedia with many maps and illustrations based on contemporary knowledge. The work is divided into fourteen main sections and contains information about the following: (1) astronomy ('Heaven'); (2) geography ('Earth'); (3) men ('Man'), which includes portraits and biographies of emperors, famous officials, Buddhist and Daoist monks, and pictures of foreigners of actual or imaginary countries; (4) directives for time and seasons of the year; (5) buildings; (6) instruments, which discusses besides ceremonial utensils, data about ships, movable vehicles, fishing gear, arms (including firearms), tools for agriculture, irrigation, weaving, and the making of furniture; (7) human physiology; (8) clothing for official and private use; (9) human matters, which embraces music (including playing instruments), games, calligraphy and painting instructions, dances, breathing gymnastics, and cock-fighting; (10) ceremonies; (11) precious things; (12) literary history

⁵⁰ Bauer (1966) 684 translates the title of this compilation as 'Great handbook (of the era) "Eternal Joy"' which was the ruling period of the third Ming emperor Chengzi (reigned 1403–24). On the compilation of the *Yongle dadian*, see Guo Baigong (1937).

⁵¹ Bauer (1966) 684.

⁵² *Yongle dadian* was compiled during the same period that the Ming government engaged in an expensive war on its southern border with what is now Vietnam, and subsidised the seven costly voyages of Zheng He.

⁵³ Wilkinson (2000) 604–5. A second manuscript copy was completed in 1567 but it too did not survive in entirety.

(of the Confucian classics and poetry); (13) birds and beasts; (14) plants and trees.⁵⁴ Compared to other Ming encyclopaedias, the contents of this work are rather miscellaneous, and contemporaries as well as later bibliographers criticised it for its organisation and presentation. The drawings might have been rather simple by Ming-era sophisticated printing standards, but they did serve as the basis of many of the illustrations in the eighteenth-century *Gujin tushu jicheng*.⁵⁵

The second example of a well-illustrated Ming *leishu* is the *Tushu bian* 圖書編 (*Register of illustrations and books*; prefaced in 1623), compiled by Zhang Huang 章潢 (1527–1608) during the years 1562–85.⁵⁶ This work, a monument to the sophistication of Ming printing technology, is full of charts and diagrams, including those visualising celestial phenomena and the calendar. It is divided into four main sections focused on: (1) the Confucian classics; (2) cosmology, astronomy, and the calendar; (3) a detailed geography of the Ming empire including subjects related to border defence and foreign peoples inside and outside the Chinese frontier; (4) physical and moral qualities of men, with emperors and famous personalities in Chinese history. The last two chapters concern ‘strange phenomena’ and directions for writing poetry.⁵⁷ The maps in this collection, which Zhang created himself, owe much to the influence of the *mappa mundi* (1584) by the Jesuit Matteo Ricci (1552–1610), with whom Zhang had had contact. Thus, one may argue that the *Tushu bian* reflects the growing awareness of the literati elite that the Chinese empire was in fact part of a larger world with new kinds of neighbours.

These two encyclopaedias, which were much more comprehensive in content than earlier *leishu*, may be considered indicative of changing styles in literati culture from the mid-sixteenth century.⁵⁸ It seems obvious that the motive of encyclopaedia compilers like Wang Qi or Zhang Huang went beyond the narrow chambers of the examination hall and extended to the wider dimensions of elite discourse and learning. With the extraordinary failure rate of the civil service exams on the increase, there were more and more educated men who never saw an official post, and who with time

⁵⁴ There are many available modern editions of the *Sancai tuhui*, and at least one original copy exists in the Rare Books Collection of the Harvard-Yenching Library.

⁵⁵ Deng and Biggerstaff (1969) 144. This reference also refers to the *Sancai tuhui* as an ‘encyclopaedia of arts and crafts’. Goodall (1979) gives an analysis of the images in this encyclopaedia.

⁵⁶ On Zhang Huang, see DMB 83–5. The *Siku quanshu* editors also considered this *leishu* valuable. The *Tushu bian* is the fiftieth of the 65 *leishu* reproduced in the compilation.

⁵⁷ Franke (1968) 313.

⁵⁸ See Zurndorfer (2002) for a general discussion on Ming literati and Chinese culture.

on their hands (and sufficient income), indulged in book collecting and built up private libraries that enhanced their social and cultural status.⁵⁹ The modern historian Joseph McDermott designates such men ‘cultural brokers’ because, according to him, they had a monopoly on all aspects of publishing, short of the actual manual labour, and thus they ‘brokered’ what was of significance in literati culture.⁶⁰ Some of these individuals, like Wang Qi or Zhang Huang, took their passion for books into encyclopaedia production, but there were also scholars who restricted their infatuation with reading and learning to their personal libraries within their own family compounds, and consequently denied others access to their collections.⁶¹ They also were loathe to make known, by way of catalogues or listings, the contents of their library holdings.⁶²

Given these conditions, as well as the lack of government facilities available to those in need of books either for examination study or philosophical speculation,⁶³ it does not seem surprising that a new kind of *leishu* compiler, whose origins lay not in scholarship but in the book trade, emerged at this time.⁶⁴ Among the most eminent of these entrepreneurial encyclopaedia editor-compilers was Hu Wenhuan 胡文煥 (fl. c.1596). Hu owned publishing facilities and bookshops in Nanjing and Hangzhou where he printed more than 346 works that he later anthologised into many editions of a *leishu* collectanea called *Gezhi congshu* 格致叢書 (*Collectanea of works inquiring into and extending knowledge*; 1590s). According to the modern scholar Wang Baoping, literati-officials cataloguing extant encyclopaedias in the 1780s, found 200 versions of Hu Wenhuan’s *Gezhi congshu*.⁶⁵ While Hu varied the editions of his encyclopaedia for different kinds of buyers, ranging

⁵⁹ On the examination system, see Elman (2000). ⁶⁰ McDermott (2006) 144–6.

⁶¹ The most famous instance of this kind of ‘literary hoarding’ is the Tianyige 天一閣 Library established in 1560 in Ningbo (Zhejiang province). Its founder Fan Qin 范欽, a rich official, permitted only his direct male descendants to gain access to his books, and solely during the daytime. Built in part in brick, and located within a special moat, the Tianyige Library endured more than 400 years intact, and managed to exclude all non-family members from entry until the twentieth century: see McDermott (2006) 136–9; also Ping Situ (2007).

⁶² For McDermott (2006) 146 this situation is significant. According to him, even though there was more book-printing, more bookstores (especially in the lower Yangzi valley), and more interest in books from the sixteenth century than ever before; there was also a steadfast reluctance by owners of learned works to share these with others.

⁶³ On the deteriorating conditions of Ming official libraries, see McDermott (2006) 130–4. Although *shuyuan* 書院 (academies) flourished at this time, many of them became nothing more than cram schools for the now hyper-competitive examination system.

⁶⁴ For more information about the late Ming book trade, and the role of the commercial imprint, see Widmer (1996); also Brokaw (2005).

⁶⁵ Wang Baoping (1991).

from lowbrow to intellectual, the core of his collection remained a repository of classical, historical, institutional, and technical works from antiquity to his own era. Some versions of his *leishu* were said to have as many as 37 categories (*lei* 類) of ‘knowledge’, including classics, philology, phonology, historical studies, rituals and regulations, legal precedents, geography, medicine, Daoism and Buddhism, agriculture, stars, painting, epigraphy, and so on. The Princeton University historian Benjamin Elman considers the *Guzhi congshu* a product of its time, when enterprising publishers like Hu perceived a growing interest in a kind of methodology for extending all knowledge, whether moral, textual, or worldly, into encyclopaedias.⁶⁶ Elman found that Hu emphasised the precision of ‘naming things’ in the highbrow editions of his encyclopaedia: the original 46 classical works he anthologised were ordered according to the usual Heaven-Earth-Man schema, with special attention to names for China’s natural resources, arts, and manufacturing.⁶⁷ In sum, ‘the *Gezhi congshu* collectanea emphasised a broad learning of phenomena (*bowu* 博物), which encompassed natural and textual studies within a humanist, esoteric, and institutional agenda.’⁶⁸

The expression ‘broad learning’ was used in the titles of other *leishu* publications, including one more Ming encyclopaedia, the *Guang bowu zhi* 廣博物志 (*Expansion of a treatise on curiosities*; first printed in 1607), compiled by Dong Sizhang 董斯張 (1586–1628).⁶⁹ In these encyclopaedias what we term ‘natural history’ was essential (in contrast to a singular focus on literary and historical models in more conventional *leishu*), and thus, arguably, evidence of an extension of the epistemological boundaries of literati learning. According to Elman, ‘these works stressed correlating each human event, object-implement, or natural phenomenon in terms of a teleology of their usefulness to humans and presented a genealogy of discovery that traced each item back to the appropriate sage, ruler, or scholar in antiquity.’⁷⁰ Elman surmises that Hu Wenhuan’s encyclopaedic endeavours, and we may add by implication those of Wang Qi and Zhang Huang, were integral to an ever-growing appreciation of how the classification of the etymologies of words, used to encompass both natural and man-made phenomena, became central in intellectual discourse: ‘the historical array of [*leishu*] categories and entries . . . represented a distanced account of natural phenomena as words in a test that needed to be decoded primarily through

⁶⁶ Elman (2007) 133. ⁶⁷ Elman (2007) 147. ⁶⁸ Elman (2007) 148.

⁶⁹ The earlier *leishu* include Zhang Hua 張華 (232–300)’s *Bowu zhi* 博物志 (*A treatise on curiosities*), and the Song dynasty version Xu bowu zhi 續博物志 (*Continuation of a treatise on curiosities*), both of which were included in many editions of Hu Wenhuan’s *Gezhi congshu*.

⁷⁰ Elman (2007) 151.

the analysis of language'.⁷¹ Here is an alternative way that the scholar-elite could perceive the world that went beyond the official canon of learning dominating the examination system. The process of classifying information was also fundamental in those *leishu* directed toward 'the lesser-learned world', to which we now turn our attention.

The lesser-learned world and *leishu*

The *leishu* destined for the highbrow Ming elite was paralleled by the publication of 'encyclopaedias of daily use' aimed at the lesser-learned world of commoners and the semi-literate. During the Ming, as the commercial economy expanded and brought prosperity to a wider range of society, literacy also spread to a certain extent among lower status groups, including petty merchants, landowning peasants, and even itinerant workers.⁷² In search of some understanding of traditional Confucian values and social skills, as well as amusement, these persons became the principal target of an ever-growing pulp publishing industry anxious to cash in on the mass market for primers, moral tracts, route guides. The growth of the Chinese economy from the mid-Ming had benefited a wide-range of persons who with more resources at their disposal now, aspired to better themselves. The *riyong leishu* fulfilled the needs of these people wanting moral guidance as well as information about practical matters such as letter writing or medicaments.

Already in the Yuan dynasty there appeared a precursor of this kind of *leishu*, the *Jujia biyong shilei quanji* 居家必用事類全集 (*Complete collection of classified affairs essential for those living at home*), an encyclopaedia geared to local clerks who served magistrate officials in regional posts all over the Chinese empire. Here lower-ranked administrators could read about literati customs, home rituals, sericulture, medical advice, and so on.⁷³ An even earlier *leishu* of this type, entitled *Shilin guangji* 事林廣記 (*Wide gleanings of miscellaneous matters*), compiled at the end of the Song dynasty by the Jianyang native Chen Yuanjing 陳元靚, delivered advice, with copious illustrations, about letter writing.⁷⁴ The late Ming editions of these 'encyclopaedias of daily use' continued to communicate this kind of information as well as that about a wealth of practical matters: medical prescriptions, divination formulas, astrology, geomancy, calligraphy, games, and even travel

⁷¹ Elman (2007) 152.

⁷² See discussions of this social mobility and printing in Sakai (1970); Brook (1998) 167–71.

⁷³ Elman (2000) 226–7. ⁷⁴ Chia (2002) 144.

advice.⁷⁵ Chia has discovered that the greatest number of *leishu* published in Jianyang during the Ming – nearly a quarter of the total – were collections of moralistic anecdotes (category ‘7’ in her list of types), intended for young children and their teachers. As for Jianyang household encyclopaedias, she found that these ‘manuals for everyday living’ presented information on a wealth of topics:

calendrical, astronomical, and astrological charts and tables specifying auspicious and inauspicious days for different activities; and on agriculture (when to plant which crops, to cultivate silkworms); rules of deportment and the proper forms of address for one’s superiors and inferiors; divination methods, including geomancy, palmistry, chronomancy, oneiromancy, numerology, physiognomy, and astrology; pictures and diagrams of Daoist charms; the many ways of writing auspicious characters; abbreviated writing manuals; a list of the hundred family names; the four styles of calligraphy; rules of games; proverbs and short homilies in a popular Confucian style; word puzzles and jokes; and the routes and distances between important places in the country.⁷⁶

Some *riyong leishu* offered legal advice for making and breaking tenancy contracts, and counsel to merchants on the complications of trade and insolvency.⁷⁷

One of the best known Ming daily-use encyclopaedias was the (*Xinke tianxia simin bianlan*) *Santai wanyong zhengzong* 新刻天下四民便覽三台萬用正宗 (*Santai’s orthodox instructions for myriad uses for the convenient perusal of all the people in the world, newly engraved*; 1599), compiled by Yu Xiangdou 于象斗 (15?–1609).⁷⁸ In the preface to this work, Yu emphasised this *leishu*’s comprehensiveness: ‘All that is necessary for daily use is included in this volume; this is indeed a book that is both concise and comprehensive, with its materials being carefully and appropriately selected; it can be taken as a guide (for daily activities) and transmitted to future readers.’⁷⁹ The *Santai wanyong zhengzong*, as it is better known, anthologised particular

⁷⁵ Chia (2002) 377, n. 141 rightly distinguishes between merchant handbooks and those household encyclopaedias containing information about commerce and merchants. These works are similar in some ways to the almanacs analysed by Rhodes in this volume.

⁷⁶ Chia (2002) 237.

⁷⁷ See Zurndorfer (2011). Given the centrality of both written contracts and litigation in late imperial China, it is not surprising that these encyclopaedias would also include information about these matters.

⁷⁸ There is an available modern reprint of this encyclopaedia: see the References at the end of this paper. On Yu Xiangdou, see *DMB* 1612–14. He was a descendant of a well-known Jianyang family of commercial printers. There is controversy about what Yu himself compiled, and what he copied from other encyclopaedias. On Yu’s reproductions of himself, see Chia (2002) 220.

⁷⁹ Translated by Shang (2005) 68.

works from other print materials: travel guides, joke books, and medical texts (but not classical literature or examination essays). It paid special attention to two topics: merchants, and personal welfare. With regard to travelling traders, this *leishu* put forward suggestions about coping with strangers, making contact with merchants from other locales, and protecting goods and money from thieves. Also included here was practical advice for merchants visiting brothels: the *Santai wanyong zhengzong* contained specific instructions about how to deal with courtesans, from etiquette to guidance about the dangers of financial exploitation. There was also a subsection on the art of flirtation, and with a warning that ‘the brothel is not Confucius’ teaching hall’.⁸⁰ Similarly, another well-known encyclopaedia, the *Wanbao quanshu* 萬寶全書 (*Encyclopaedia of myriad treasures*; c. 1600) offered instructions for increasing sexual pleasure both in the home and in the brothel.⁸¹

One third of the *Santai wanyong zhengzong*’s contents focused on personal welfare and life’s transitions such as birth, aging, illness, and death – in other words, the realm of private life. According to the modern scholar Shang Wei, this focus implies a possible transformation of knowledge and practice in the late Ming. He regards the *riyong leishu* of this era as evidence of a greater appreciation of what he terms ‘secular knowledge’, by which he means that the broad public had a desire to acquire and circulate knowledge concerning the everyday.⁸² At the same time, he cautions that one should not divorce the *riyong leishu* from the more scholarly encyclopaedias. For one thing, the daily-life encyclopaedias for the most part followed the categories and hierarchy (Heaven-Earth-Man) of the more elite works. Also, it is likely that the better-educated people, including scholar-officials, were also avid readers of these daily-life encyclopaedias. Moreover, Yu Xiangdou himself made clear that he targeted a ‘broad reading public’, and hoped that by attracting the more scholarly segment of the population, he could also magnetise readers from the lower orders with the comforting idea that they were actually reading the same books as the socially well-to-do.⁸³

Nevertheless, the reference system of the daily encyclopaedias was ‘loose’, and unlike the scholarly *leishu*, they treated all the topics as equally legitimate: ‘disparate discourses coexist without necessarily undermining one another; one chapter teaches Confucian rituals, and the next lays out strategies for dealing with courtesans’.⁸⁴ Whether the *riyong leishu* were indicative of an epistemic shift, as Shang Wei contends, remains debatable, but it is

⁸⁰ Cited by Shang (2005) 70.

⁸¹ Wang Ermin (1999) 199–203. ⁸² Wang and Shang (2005) 10.

⁸³ Shang (2005) 72, n. 17. ⁸⁴ Shang (2005) 74.

certain that the end of the Ming and the installation of the succeeding (Manchu) Qing 清 (1644–1911) dynasty brought encyclopaedia production into a new phase.

Leishu and the ‘High Qing’

China historians regard the eighteenth century as an age of scholarship: when emperors and bureaucrats honoured learning and the civil values of classical study and humanist principles to an unprecedented degree. Never before, and never again, was there a regime in China’s development that did so much to consolidate knowledge and scholarship with officialdom.⁸⁵ It was during the era of the ‘High Qing’, beginning c. 1680 until c. 1800, a period including the reigns of the three great emperors Kangxi 康熙 (r. 1662–1722), his son Yongzheng 雍正 (r. 1723–35), and his son Qianlong 乾隆 (r. 1736–96), that imperial China reached the apotheosis of its military power and economic prosperity. A rich and active cultural life supported by these rulers empowered the rise of an academic community of scholars which engaged in learning in the broadest sense, from the establishment of schools, academies, and libraries to the editing and printing of books and collectanea. Thus, under these conditions, it is not surprising that *leishu* compilation reached new heights of appreciation and production.

Mention has been made of the extraordinary *leishu*, the Qinding *Gujin tushu jicheng* which was conceived by the Kangxi emperor (who did not live to see its completion) as a demonstration of his reverence for Chinese scholarship, but probably also as a means to divert attention away from the Manchu military conquest which was still relatively fresh in the minds of Chinese intellectuals.⁸⁶ With its 10,000 *juan* plus 40-*juan* index, this encyclopaedia became the largest of the *leishu* to have been printed. Under its 6 main categories (celestial matters, geography, human relationships, arts and sciences, Confucianism and literature, and political economy), there were 32 sections and more than 6,000 subsections.⁸⁷ The compiled materials ranged in chronology from the Zhou dynasty through the seventeenth century, and the quoted sources were classified strictly according to eight main headings: 1) orthodox writings, especially the classics; 2) other Confucian writings; 3) biographies; 4) literary works; 5) felicitous phrases; 6) historical works; 7) indirect reports; 8) anecdotes and myths. This last

⁸⁵ See Elman (2002). ⁸⁶ Wakeman (1985).

⁸⁷ Giles (1911) is a translation and index of these sub-sections.

section included tales that had been relegated to the Song dynasty TPGJ. It was printed using copper movable type and issued in sixty copies.⁸⁸

The *Gujin tushu jicheng* was one of several colossal compilation projects, including massive dictionaries, thesauruses, and political compendia that the Kangxi emperor and his successors initiated and sponsored. These Qing rulers were active patrons of Chinese learning; they maintained the civil service examination system, encouraged the study of the classics in community schools and private academies, honoured those families with extensive libraries, and promoted the compilation of reference works and other aids to scholarship. By the second half of the eighteenth century there was an active network of scholars in the lower Yangzi valley region who independently accumulated historical texts, wrote local gazetteers, and initiated research into historical linguistics, epigraphy, and even mathematical astronomy. These individuals engaged in ‘evidential research’ (*kaozheng* 考證), an intellectual discourse which transformed learning during the Qianlong emperor’s reign.⁸⁹ ‘Evidential research’ focused on textual study, and prioritised empirical investigation and verifiable facts. Such thinking discouraged the earlier interest in metaphysical and cosmological systems that had dominated intellectual life, and shifted scholarly attention to linguistic analysis, historical phonology, precise glossing, and other matters of philology.

This linguistic turn forms the background to the greatest cultural enterprise of the eighteenth century, the *Siku quanshu* 四庫全書 (*Complete collection of the four treasures*; hereafter, SKQS), which took place between 1773 and 1784.⁹⁰ The SKQS was not an encyclopaedia but a compilation of whole texts, gathered from all over the empire, and divided into four general categories: classics, history, miscellaneous/philosophy, and belles-lettres.⁹¹ The project began when the Qianlong emperor ordered some 350 eminent scholars to work under the direction of the chief editor Ji Yun 紀昀 (1725–1805) to collect as many books as possible to make a definitive imperial library catalogue. Of the works that were assembled, almost one third originated from private collectors, ranging from high officials to salt

⁸⁸ Wilkinson (2000) 605–7; according to Bauer (1966) 688, the first instance of a copy of this encyclopaedia to be deposited in a European library was in France during the eighteenth century through the Jesuits. But this copy was incomplete, and it was only in 1877 that the British Museum in London acquired a complete edition of this work.

⁸⁹ Elman (1984) and (2002). ⁹⁰ See Guy (1987) for more info about this compilation.

⁹¹ Already before the Tang dynasty, imperial libraries utilised this broad four-category classification system: see Jiang Shuyong (2007) 6–10.

merchants.⁹² Ji Yun and his colleagues aimed to incorporate those texts that enshrined an objectivity detached from political in-fighting and ‘utopia-peddling.’ The compilers wrote that their purpose was to expunge all selfish interests or subjectivism from Chinese elite thought, as well as those works considered ‘anti-Manchu’, and so make apparent (from the choice of texts) the principles of public spiritedness. Woodside sums up their endeavour:

the great *Four Treasuries* project was hardly a complacent tribute to successful ‘orthodoxy’ in China. Nor was it a work of hide-bound conservatism, as has been suggested to contrast it with its western contemporary counterpart, the *Encyclopédie* of the eighteenth-century French Enlightenment thinkers, supposedly a creative assault on feudal traditionalism. Rather, the compilers’ picture of two millennia of philosophical warfare, in which little progress had been made, merely the substitution of one particular bias by another, was emperor-free history whose main theme was the literati’s quest for self-mastery, not their submission to an unchanging monarchical empire.⁹³

The result of the Qianlong emperor’s command was the examination of some 10,588 titles of which 3,461 works were selected for inclusion in the library, and reproduced in the SKQS. The selected books, many of which were chosen on the basis of ‘evidential research’ methodologies, were put aside, and prepared for reproduction. The result was a compilation totalling 2.3 million hand-scribed pages, filling 36,000 large folio volumes.⁹⁴ Seven duplicate copies were made and deposited in seven specially designed library buildings in palaces in different locations in the south and north of the empire.⁹⁵ In addition, the SKQS editors also compiled an annotated catalogue of all the 3,461 books included, and brief notes on the works not admitted to the ‘Four Treasuries’.⁹⁶ The SKQS was divided into 44 categories in total, subsumed under the four general categories.

The number of *leishu*, which form one subset of the total 44 included in the SKQS compilation, is 65. They were classified under the general category

⁹² Woodside (2002) 283. By this time the salt merchants’ bibliomania was known for its sophistication and expertise.

⁹³ Woodside (2002) 286–7. Compare Harries and Németh in chapters 8 and 11 on the political power behind massive compilations.

⁹⁴ The modern edition, consisting of some 1,500 volumes, occupies as much as 215 running feet of shelves: see Mote (1989–90).

⁹⁵ Wilkinson (2000) 274. Only four copies survived China’s wars and rebellions in the last two centuries. See also Wang Chengzhi (2007). A photo-facsimile of the Wenyuan ge 文淵閣 (Wenyuan palace) edition, which was the best-preserved, is now widely available. In the 1980s the Commercial Press in Taipei produced the 1,500 volume edition which many sinological libraries all over the world have acquired. There are also now a number of CD-ROM editions.

⁹⁶ Wilkinson (2000) 275–6. Typical works excluded from the SKQS included sample examination essays commercially printed, collections of correspondence, and books of decorative calligraphy.

‘miscellaneous/philosophers’ which itself contains a total of 14 subdivisions, totaling 930 works. *Leishu* is the eleventh subdivision among these 14 subdivisions; it follows the subdivision ‘miscellaneous writers’, and precedes the subdivisions ‘novels’, Buddhism and Daoism. According to the catalogue of the SKQS, the *Siku quanshu zongmu* 總目 (*Annotated catalogue of the complete library of the four treasures*), the compilers examined some 217 *leishu* before selecting the final 65 for reproduction.⁹⁷ The *leishu* in the SKQS encompass a wide spectrum of materials in both time and subject. Ranging from encyclopaedias published as early as the Liang 梁 (502–57) dynasty, to those as late as the mid-eighteenth century, these compilations were rather diverse in size and subject matter. The 65 *leishu* focus on a wide variety of genres, including those works elucidating phrases and literary allusions, or those recording references to the arts and sciences (material culture), as well as those serving as biographical lexicons. The SKQS editors arranged the *leishu* chronologically, with the result that one may find per dynastic era the following number of titles: Liang (1); Tang (10); Song (27); Yuan (4); Ming (12); Qing (11). In terms of the total number of *juan* per encyclopaedia, the *leishu* vary considerably, from as few as one, i.e. the Liang dynasty work *Gujin tong xingming lu* 古今同姓名錄 (*A record of names from the past and the present*; 552–54), to as many as 1,136 *juan* in the *Gujin shiwen leiju* 古今事文類聚 (*Classified collection of affairs and compositions from the past and the present*), compiled during the Song dynasty, and which served as a literary anthology based on the same format as the Tang works *Yiwen leiju* and *Chuxue ji*. Even on a more prosaic level, the collection of *leishu* in the SKQS offers rich data for the modern historian interested in China’s material development. For example, the sixty-first *leishu* in the SKQS compilation, the 100-*juan* *Gezhi jingyuan* 格致鏡原 (*Research and mirrored sources*) compiled by Chen Yuanlong 陳元龍 (1652–1736), is in essence a guide to Chinese arts and sciences. One finds here information about everyday topics, including textiles and silk (*juan* 27), precious stones (*juan* 32–6), and smoking accessories (*juan* 53–4), a subject which indicates how even contemporary material culture became a part of the SKQS editors’ concerns.

***Leishu* and the passion to collect, select, and protect: the ties that bind**

The SKQS project ended, but for many of its compilers their interest in *leishu* production did not terminate. During the 1790s a significant number

⁹⁷ Kaderas (1998) 49, n. 10.

of those same individuals worked with Wang Chutong 王初銅 (1729–1821), also a former SKQS editor, to assemble the *Lianshi* 廛史 (*Trousseau history*), the first major encyclopaedia to focus entirely on women and female matters.⁹⁸ Citations about every aspect of a woman's existence were collected into this 100-*juan leishu*: life's transitions, from birth to death; from betrothal and marriage to body and appearance (including clothing, jewelry, and other adornments); and work, from weaving and embroidery, to poetry writing and other arts; from the role of women in the kinship relations within the imperial family to those in the families of officials as well as common people; from Daoist transcendents to the goddess Zhang E and the female savior Guanyin. Moreover, women from all social statuses, from empresses to streetwalkers were included in this encyclopaedia.⁹⁹

In compiling the *Lianshi*, Wang and his fellow editors applied the methodology of 'evidential research' to retrieve, restore, and reproduce lost and unknown, as well as familiar, texts about women. In this way, they demonstrated their commitment to the academic ideals that had also penetrated the SKQS project. But their work here also revealed the influence of their wives and other close female relatives.¹⁰⁰ Of the hundred contributors to the *Lianshi*, a significant percentage was married to women with prestigious literary reputations.¹⁰¹ One may infer that their appreciation of these women's talents spurred their involvement in the *Lianshi* compilation, and that the topics they pursued therein reflect that admiration. Many of these men enjoyed 'companionate marriages' in which both partners were similarly cultivated and educated in the classics. And so, it should come as no surprise that the first two categories in the *Lianshi* concern husband-and-wife relations. The *Lianshi* is both a unique historical source about Chinese women's lives, and a brilliant example of how *leishu* mirror epistemological and social changes in imperial China.

In sum, this paper has attempted to demonstrate the value of Chinese encyclopaedias for both contemporaneous and modern scholars. While the latter group recognises the usefulness of scholarly *leishu* as repositories of lost works, and *riyong leishu* as noteworthy indicators of the culture and attitudes of strata below that of the Confucian elite, the former appreciated these works as transmission vehicles of systematic collected data about natural

⁹⁸ See Zurndorfer (1999); Ho (1998). One can count about sixty men who were involved in both projects. A modern edition of the *Lianshi* has been edited by Li Yonghu (1994).

⁹⁹ Zurndorfer (1999) 379 gives the English translation of the chapter titles in the *Lianshi*.

¹⁰⁰ On the relationship of learned men and the promotion of literate women in Qing China, see Ho (1999).

¹⁰¹ Zurndorfer (2012).

phenomena, language, or government institutions. In this study, I have shown how *leishu* evolved from government handbooks for emperors, to study texts for students preparing for the examination system, to illustrated guides to natural and geographical marvels for the intellectually curious, to advice manuals for the ‘lesser learned’. At times encyclopaedias were also compiled in fantastic proportions under the watchful eyes of imperial regents anxious to exert power and influence through this medium. But more often, *leishu* were the product of enterprising individuals who printed them as marketable textbooks and accessible reference tools. By the Ming dynasty, *leishu* helped to extend knowledge beyond the official canon and provided the framework by which new information such as that presented by the Jesuits could be incorporated into existing scholarly agenda. And in the eighteenth century, with the popularity of ‘evidential research’, *leishu* became all the more important for literati scholars in pursuit of more precise knowledge about the things, events, and trends described in the ancient classics. For over fifteen hundred years, ‘encyclopaedias’ were an integral feature of Chinese learning and intellectual traditions, repeatedly adapted in response to wider cultural and political changes, and an important vehicle for the compilation of knowledge.

Note on sources

Listed below are the ‘encyclopaedias’ discussed in this article that are extant, with bibliographical information about available edition(s), either modern reprint editions, or those reproduced in the edition of the *Siku quanshu* (SKQS), commonly referred to as the Wenyuange 文淵閣 copy which was printed by the Commercial Press in Taipei in the 1980s. All texts that are part of the SKQS and listed here are in that edition.

Beitang shuchao 北堂書鈔 (*Excerpts from the Northern Hall*; c.630); available SKQS, vol. 889, 1–850.

Bianzhu 編珠 (*Stringed pearls*; early seventh century); available SKQS, vol. 887, 37–136.

Cefu yuangui 冊府元龜 (*Models from the archives*; c. 1013); available SKQS, vols. 902–19.

Chuxue ji 初學記 (*Writings for elementary instruction*, 713–42); available SKQS, vol. 890, 1–498.

Gezhi jingyuan 格致鏡原 (*Research and mirrored sources*; c. mid-eighteenth century); available SKQS, vol. 1031, 1–736.

- Guang bowu zhi* 廣博物志 (*Expansion of a treatise on curiosities*; 1607); available SKQS, vols. 980–1, 604.
- Jizuan yuanhai* 記纂淵海 (*Complete source for composition*; 1209); available in modern edition; Beijing, 1988.
- Lianshi* 廩史 (*Trousseau history*; 1797); available in modern annotated edition, compiled by Li Yonghu 1994 (see other sources).
- Lidai zhidu xiangshuo* 歷代制度詳說 (*Detailed explanations of institutions through the ages*; c. 1180); available SKQS, vol. 923, 893–988.
- [*Qinding* 欽定] *Gujin tushu jicheng* 古今圖書集成 (*Imperially approved synthesis of books and illustrations past and present*), compiled by Chen Menglei 陳夢雷 *et al.*; original 1726–8; Shanghai, 1934, reprint.
- Sancai tuhui* 三才圖會 (*Assembled pictures of the Three Realms* [Heaven, Earth, and Man]; 1607); available in modern edition; Shanghai, 1988.
- Taiping guangji* 太平廣記 (*Extensive gleanings of the Reign of the Great*; 978); available in modern edition; Beijing, 1996 [sixth printing].
- Taiping yulan* 太平禦覽 (*Imperial digest of the Reign of the Great*; 983); available in modern edition; Beijing, 1995 [fifth printing].
- Tongdian* 通典 (*Encyclopaedic history of institutions*; 801); available in modern edition; Beijing, 1996 [third printing].
- Tushu bian* 圖書編 (*Register of illustrations and books*; prefaced 1623); available SKQS, vols. 968–72, 862.
- Wenyuan yinghua* 文苑英華 (*Finest flowers of the preserve of letters*; 987); available in modern edition; photolithographic production of Ming edition; Beijing, 1966.
- (*Xinke tianxia simin bianlan*) *Santai wanyong zhengzong* 新刻天下四民便覽三台萬用正宗 (*Santai's orthodox instructions for myriad uses for the convenient perusal of all peoples in the world, newly engraved*; 1599); available in reprint series *Chūgoku nichiyō ruisho shūsei* 中国日用類書集成, vols. 3–5, Tokyo, 2000.
- Yiwen leiju* 藝文類聚 (*Collection of literature arranged by categories*; c. 660); available SKQS, vol. 887, 137–754; vol. 888, 1–980.

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